

# Northumbria Research Link

Citation: Moussa, Mohamed Salem Ali (2009) An eclectic approach to the determinants of foreign direct investment inflows to the Libyan oil and gas sector. Doctoral thesis, Northumbria University.

This version was downloaded from Northumbria Research Link:  
<https://nrl.northumbria.ac.uk/id/eprint/1916/>

Northumbria University has developed Northumbria Research Link (NRL) to enable users to access the University's research output. Copyright © and moral rights for items on NRL are retained by the individual author(s) and/or other copyright owners. Single copies of full items can be reproduced, displayed or performed, and given to third parties in any format or medium for personal research or study, educational, or not-for-profit purposes without prior permission or charge, provided the authors, title and full bibliographic details are given, as well as a hyperlink and/or URL to the original metadata page. The content must not be changed in any way. Full items must not be sold commercially in any format or medium without formal permission of the copyright holder. The full policy is available online: <http://nrl.northumbria.ac.uk/policies.html>



**Northumbria**  
**University**  
NEWCASTLE



**UniversityLibrary**

# Northumbria Research Link

Citation: Moussa, Mohamed Salem Ali (2009) An eclectic approach to the determinants of foreign direct investment inflows to the Libyan oil and gas sector. Doctoral thesis, Northumbria University.

This version was downloaded from Northumbria Research Link:  
<http://nrl.northumbria.ac.uk/id/eprint/1916/>

Northumbria University has developed Northumbria Research Link (NRL) to enable users to access the University's research output. Copyright © and moral rights for items on NRL are retained by the individual author(s) and/or other copyright owners. Single copies of full items can be reproduced, displayed or performed, and given to third parties in any format or medium for personal research or study, educational, or not-for-profit purposes without prior permission or charge, provided the authors, title and full bibliographic details are given, as well as a hyperlink and/or URL to the original metadata page. The content must not be changed in any way. Full items must not be sold commercially in any format or medium without formal permission of the copyright holder. The full policy is available online: <http://nrl.northumbria.ac.uk/policies.html>

**AN ECLECTIC APPROACH TO THE DETERMINANTS  
OF FOREIGN DIRECT INVESTMENT INFLOWS TO  
THE LIBYAN OIL AND GAS SECTOR.**

**By**

**MOHAMED SALEM ALI MOUSSA.**

B.Sc., Omar Al-Mukhtar University, Libya, 1992.  
M.Sc., Aberdeen University, Scotland UK, 2000.

A thesis submitted in partial fulfilment of the requirements of  
Northumbria University for the degree of Doctor of Philosophy.

Newcastle Business School,  
Northumbria University,  
Newcastle, UK.  
September 2005.

## **ABSTRACT**

This study involves a detailed analysis of the dynamics of the oil sector in Libya, and reviews the process of economic development in order to identify key issues and priorities for future development. As with many other developing countries, Libya has received insignificant FDI inflows over the study period 1962-2003. The experience of the developing world in particular suggests that it is far from certain whether FDI will indeed act as an engine of transition in Libya. Libya places great importance on foreign capital in the oil sector as a critical element of economic growth.

The main aim of this study is to identify and analyze the economic factors giving rise to FDI inflows to the Libyan oil sector during the study period. It reviews FDI trends in Libya, both in the regional and international contexts, and takes into account the evolution of various policies and measures introduced in order to attract FDI.

Primary data were collected through a questionnaire-based survey from a sample of 35 foreign oil companies in Libya, along with 20 interviews with government officials. Using annual time series data, the study finds that the nationalization of foreign oil companies in 1972 has negatively influenced FDI inflows; whereas country wealth and the lagged value of FDI positively influence FDI inflows to the Libyan oil sector.

Since sanctions were lifted, Libya's relations with the world are becoming normalized and there are opportunities for foreign investment in every sector of the economy associated with the government's new open policy of adopting FDI, which is already visibly growing. Libya is considering changing its 40-years old hydrocarbon legislation to improve the terms for foreign investment. Therefore, the Libyan foreign investment environment is promising for the foreseeable future.



## **ACKNOWLEDGEMENT**

First and foremost, I praise and glorify ALLAH (God). All praise be to him who has helped me during the whole of my life, and who has enabled me to complete this work.

I wish to express my gratitude to the Libyan Secretariat of Education for extending my scholarship grant which allowed me to complete my M.Sc & P.hD work. I would like to take this opportunity to express my deep appreciation and gratitude to my principal thesis supervisor, Dr. Majid Taghavi (Newcastle Business School) who has provided constructive criticism, stimulating suggestions and unlimited encouragement at every stage of my writing of this thesis. I also extend my thankfulness to the previous second supervisor Dr. Kevin Hinde and Dr. Barrie M. Craven (Newcastle Business School) my current second supervisor for his support and help.

Moreover, I also extend my thanks to Dr. Dilek Demirbas (Newcastle Business School) for her support and assistance during my PhD study at the university.

I would like to express my gratitude to Dr. Jon Pemberton (Newcastle Business School, Operations Analysis and Human Resource Management) for his lectures on SPSS software and also for his guidance and patience during the period of my primary data analysis.

Also my thanks and extended to the sample of interviewees for their warm welcomes, time, generous cooperation and personal interest. I would like to express my gratitude to all the managers of the foreign oil company investing in Libya for their time, patience, and assistance in filling in the questionnaires.

I would like to thank the Library staff at the Central Bank of Libya (Tripoli branch) for their warmth, patience and understanding during my two visits to Libya, who provided me with many journals, books, magazines, bulletins, annual reports and other materials.

## **DEDICATION**

I would like to dedicate this work to the following:

- The pure spirit of my mother, who died in the summer of 1993.
- My parents who taught me from the beginning to tell the truth and only the truth, and for their spiritual support and constant encouragement to lead a better life.
- My beloved wife for her love, moral support, understanding, loneliness and patience.
- My four sons Salem, Ali, El-Mutasim and Ashref. The smiles of my kids make every day worthwhile, and I hope they see a better future.
- My brothers and sisters.
- A sunny future for my society and country.

## **DECLARATION**

I certify that this work has not been accepted in substance for any degree and is not concurrently submitted for any degree other than that of Doctor of Philosophy of the Northumbria University. I also declare that this work is the result of my own investigation except where otherwise stated.

**Signature of Student:** .....

## LIST OF ABBREVIATIONS

AMU	Arab Maghrib Union.
APICORP	Arab Petroleum Investments Corporation.
AU	African Union.
CEE	Central and Eastern Europe.
CIS	Commonwealth of Independent States
EIA	Energy Information Administration.
EMP	Euro-Mediterranean Process (5+5 Dialogue).
FDI	Foreign Direct Investment.
FOCs	Foreign oil Companies.
GPC	General People's Congress.
IAIGC	The Inter-Arab Investment Guarantee Corporation.
ILO	International Labour Organization.
JVs	Joint Ventures.
LD	Libyan Dinar.
LCB	Libyan Central Bank.
LFIB	Libyan Foreign Investment Board.
MENA	Middle East and North Africa.
MNCs	Multi-national Companies.
NA	North Africa.
NAT	Nationalization of Foreign Oil Companies.
NOC	National Oil Corporation.
NOI	Net Outward Investment.
OAPEC	Organization of Arab Petroleum Exporting Countries.
ODEP	Open Door Economic Policy.
OECD	Organization for Economic Co-operation and Development
OWEM	OPEC's World Energy Model.
RCC	Revolutionary Command Council.
SANs	US & UN Sanctions.
SV	Sole Ventures
UNCTAD	United Nations Conference on Trade and Development.
WO	Wholly Owned.

## LIST OF FIGURES

FIGURE 1.1: FDI INFLOWS TO THE LIBYAN OIL SECTOR. ....	4
FIGURE 2.1: LIBYAN'S GEOGRAPHY POSITION. ....	11
FIGURE 2.2: PERCENTAGE OF THE FOREIGNERS IN THE LIBYAN POPULATION. ....	16
FIGURE 2.3: PERCENTAGE OF LABOUR FORCE TO THE POPULATION. ....	16
FIGURE 2.4: OIL REVENUES AND TOTAL REVENUES, US\$m. ....	28
FIGURE 2.5: PER CAPITAL INCOME, IN US\$. ....	31
FIGURE 3.1: LIBYAN CRUDE OIL PRODUCTION BY OPERATING COMPANIES IN MB, 2003. ....	64
FIGURE 3.2: GEOGRAPHICAL DISTRIBUTIONS OF THE LIBYAN OIL, MB, 1962-2003. ....	67
FIGURE 4.1: THEORIES OF THE DETERMINANTS OF FDI: TOWARDS A SYNTHESIS. ....	85
FIGURE 4.2: DUNNING'S DEVELOPMENT J-CURVE (2). ....	114
FIGURE 5.1: CLASSIFICATION OF CAPITAL FLOWS. ....	129
FIGURE 5.2: TYPES OF CHANGES IN FDI LAWS AND REGULATIONS, 2002A. ....	139
FIGURE 5.3: FDI INFLOWS TO THE LIBYAN OIL SECTOR. ....	140
FIGURE 5.4: FDI INFLOWS AS PERCENTAGE OF LIBYAN GDP. ....	141
FIGURE 5.5: FDI INFLOWS IN \$M, 2000. ....	142
FIGURE 5.6: FDI INFLOWS TO THE NORTH AFRICA COUNTRIES, US\$m. ....	143
FIGURE 6.1: NUMBER AND POSITION OF RESPONSES. ....	188
FIGURE 6.2: THE NATIONALITY OF THE OIL COMPANIES. ....	195
FIGURE 6.3: COMPANIES STARTED OPERATION. ....	196
FIGURE 6.4: INVESTMENT AREA. ....	197
FIGURE 6.5: INVESTMENT ACTIVITIES. ....	197
FIGURE 6.6: THE IMPORTANCE OF HAVING LOCAL PARTNER. ....	198
FIGURE 6.7: INVESTMENT MODE. ....	198
FIGURE 6.8: MARKET SIZE. ....	199
FIGURE 6.9: PROVEN OF OIL & GAS RESERVES. ....	200
FIGURE 6.10: QUALITY OF OIL. ....	200
FIGURE 6.11: LOW COSTS OF LABOUR. ....	201
FIGURE 6.12: LOWER EXTRACTION COSTS. ....	201
FIGURE 6.13: UNEXPLORED COUNTRY. ....	202
FIGURE 6.14: SECURITY PROVIDED BY THE LIBYAN GOVERNMENT FOR FOCs. ....	203
FIGURE 6.15: GEOGRAPHICAL PROXIMITY. ....	204
FIGURE 6.16: ATTRACTIVE OF LOCAL INVESTMENT POLICY. ....	204
FIGURE 6.17: THE MAIN DIFFICULTIES FACING FOREIGN INVESTORS. ....	205
FIGURE 7.1: FDI INFLOWS TO THE LIBYAN OIL SECTOR. ....	214
FIGURE 7.2: EXTRACTION COST OF CRUDE OIL PER BARREL, ....	215
FIGURE 7.3: LIBYAN OIL PRICES, IN \$ PER BARREL. ....	216
FIGURE 7.4: LIBYAN PROVEN CRUDE OIL RESERVES. ....	217
FIGURE 7.5: LIBYAN REAL GDP, IN \$M. ....	218
FIGURE 7.6: GOVERNMENT SPENDINGS, IN US\$m. ....	219
FIGURE 7.7: NATIONALIZATION OF FOREIGN OIL COMPANIES. ....	220
FIGURE 7.8: THE COUNTRY WEALTH, IN US\$ BILLION (1962-2003). ....	221
FIGURE 7.9: UN SANCTION PERIOD FROM 1992-1999. ....	222
FIGURE 7.10: WORLD OIL PRICES, IN US\$ PER BARREL (1962-2003). ....	223

**LIST OF TABLES**

TABLE 2.1: POPULATION AND LABOUR FORCE, IN MILLIONS (1962-2003).....	13
TABLE 2.2: POPULATION DENSITY OF LIBYA AND SELECTED DEVELOPING COUNTRIES. ....	15
TABLE 2.3: LIBYAN TRADE BALANCE, IN US\$ M.....	25
TABLE 2.4: LIBYAN GDP AT CONSTANT FACTOR COSTS, IN US\$M, IN 1958.....	25
TABLE 2.5: VALUE AND NUMBER OF EMPLOYEES IN THE LIBYAN ECONOMY 1958.....	26
TABLE 2.6: LIBYAN GDP AT CURRENT PRICES, US\$ MILLIONS (1962-2003).....	29
TABLE 2.7: SECTORAL EMPLOYMENT, IN THOUSANDS, (1962- 2003). ....	32
TABLE 2.8: LIBYAN TRADE BALANCES, IN US\$ MILLION (1962-2003).....	33
TABLE 2.9: LIBYAN MAJOR TRADE PARTNERS IN IMPORTS, US\$ MILLIONS.....	34
TABLE 2.10: PRODUCTION OF REFINED PRODUCTS BEFORE AND AFTER THE PLAN.....	44
TABLE 3.1: WORLD ENERGY FUEL SHARES, IN PERCENTAGES.....	48
TABLE 3.2: SUMMARY OF THE FIRST OIL DISCOVERY ACTIVITIES DURING 1958-1959. ....	50
TABLE 3.3: THE NUMBER OF OIL WELLS DRILLED IN LIBYA DURING 1958-1968.....	50
TABLE 3.4: NUMBER OF OIL WELLS DRILLED BY FOCs, 1961-1988. ....	53
TABLE 3.5: COUNTRIES WITH THE MOST POTENTIAL FOR OIL EXPLORATION IN 2000. ....	54
TABLE 3.6: CRUDE OIL PRODUCTION BY OPERATING COMPANIES PER 1000 B/D (1961-1971). ....	55
TABLE 3.7: LIBYA AND WORLD CRUDE OIL PRODUCTION IN MB, (1962–2003). ....	56
TABLE 3.8: CRUDE OIL PRODUCTIONS IN SOME ARABIC COUNTRIES M/B/D (1962-2003). ....	57
TABLE 3.9: PRODUCTION OF CRUDE OIL BY OPERATING COMPANY IN MB. ....	58
TABLE 3.10: PROVEN CRUDE OIL RESERVES PER BILLION BARRELS DURING 1962-2003. ....	59
TABLE 3.11: TOTAL CRUDE OIL PRODUCTION & EXPORT IN MILLION BARRELS (1962-2003). ....	60
TABLE 3.12: VALUE OF OIL EXPORTS AND NON-OIL EXPORTS, \$M, (1962-2003). ....	61
TABLE 3.13: EXPORTED CRUDE OIL AND REVENUES, IN MILLION US\$ (1962-2003). ....	62
TABLE 3.14: LIBYAN OIL EXPORTS BY OPERATING COMPANIES, IN MILLION BARRELS.....	63
TABLE 3.15: GEOGRAPHICAL DISTRIBUTION OF THE LIBYAN OIL EXPORTS, MB, (1962-2003). ....	66
TABLE 3.16: RESERVES, PRODUCTION & EXPORTS OF NATURAL GAS, BILLION STANDARD CU M. ....	68
TABLE 3.17: PROVEN NATURAL GAS RESERVES, BILLION STANDARD CU M (1962-2003). ....	69
TABLE 3.18: PRODUCTION OF GAS (IN BILLIONS OF CUBIC FEET). ....	69
TABLE 3.19: CAPACITY, PRODUCTION AND EXPORT OF REFINED PRODUCTS, 0.000 B/D.....	71
TABLE 3.20: EXPORTS OF REFINED PRODUCTS, (0.000, M. T).....	71
TABLE 3.21: THE VALUE OF THE LOSSES CAUSED BY THE SANCTIONS FROM 1998-1999. ....	77
TABLE 4.1: SUMMARY OF SELECTED STUDIES OF THE DETERMINANTS OF FDI. ....	122
TABLE 5.1: MOVEMENT OF FOREIGN DIRECT INVESTMENT INFLOWS IN US\$ BILLION. ....	130
TABLE 5.2: HOST COUNTRY DETERMINANTS OF FOREIGN DIRECT INVESTMENT (FDI).....	135
TABLE 5.3: BARRIERS TO FDI.....	137
TABLE 5.4: CHANGES IN NATIONAL REGULATIONS OF FDI, 1991-2002. ....	139
TABLE 6.1: POSITION AND NUMBER OF RESPONDENTS IN THE SECOND PILOT STUDY.....	182
TABLE 6.2: SUMMARY OF RESPONSE RATES FOR DIFFERENT OIL COMPANY RESPONDENTS.....	188
TABLE 6.3: NAME AND NUMBER OF INTERVIEWEES AT THE INTERVIEW PILOT STUDY.....	190
TABLE 6.4: SUMMARY OF THE INTERVIEW’S SUGGESTIONS. ....	210
TABLE 7.1: CRUDE OIL PRICES BY SELECTED COUNTRIES, \$/BARREL (1970-2003). ....	216
TABLE 7.2: THE RESEARCH VARIABLES AND THEIR STATIONARY LEVEL.....	228
TABLE 7.3: FIRST ESTIMATION EQUATION OF FDI AND ITS EXPLANATORY VARIABLES. ....	230
TABLE 7.4: ESTIMATED MODEL II.....	231
TABLE 7.5: WHITE HETEROSKEDASTICITY TEST. ....	232
TABLE 7.6: STABILITY TEST .....	232
TABLE 7.7: NORMALITY TEST BY USING JARQUE–BERA. ....	233
TABLE 7.8: VALUES OF POINT ELASTICITY FOR CW AND NAT.....	234

## TABLE OF CONTENTS

<b>ABSTRACT.....</b>	<b>I</b>
<b>ACKNOWLEDGEMENT.....</b>	<b>II</b>
<b>DEDICATION .....</b>	<b>III</b>
<b>DECLARATION.....</b>	<b>IV</b>
<b>LIST OF ABBREVIATIONS .....</b>	<b>V</b>
<b>LIST OF FIGURES .....</b>	<b>VI</b>
<b>LIST OF TABLES.....</b>	<b>VII</b>
<b>TABLE OF CONTENTS.....</b>	<b>VIII</b>
<b>1 CHAPTER ONE .....</b>	<b>1</b>
<b>INTRODUCTION.....</b>	<b>1</b>
1.1 INTRODUCTION .....	1
1.2 PURPOSE AND SIGNIFICANCE OF THE STUDY .....	2
1.3 THE RESEARCH PROBLEM.....	3
1.4 RESEARCH OBJECTIVES .....	4
1.5 METHODOLOGICAL ASPECTS .....	5
1.5.1 Primary Data .....	5
1.5.2 Secondary Data.....	5
1.6 RESEARCH ASSUMPTIONS.....	6
1.7 CONTRIBUTIONS OF THE STUDY.....	6
1.7.1 Contributions to the Literature .....	6
1.7.2 Contribution to the Libyan Government .....	7
1.7.3 Contributions to the Libyan Oil Sector (NOC) .....	7
1.7.4 Contributions to FOCs in Libya.....	7
1.7.5 Contributions to Foreign Oil Investors.....	8
1.7.6 Contributions to Researchers.....	8
1.8 OUTLINE OF THE THESIS .....	8
<b>2 CHAPTER TWO .....</b>	<b>10</b>
<b>AN OVERVIEW OF THE LIBYAN ECONOMY.....</b>	<b>10</b>
2.1 INTRODUCTION .....	10
2.2 GEOGRAPHY AND CLIMATE .....	11
2.3 POPULATION .....	12
2.4 HISTORICAL BACKGROUND .....	17
2.4.1 Pre-history: .....	17
2.4.2 The Phoenicians in Tripolitania (1000-201 BC).....	17
2.4.3 The Garamantion Empire of the Fezzan (900 BC-AD 500) .....	18
2.4.4 The Greeks in Cyrenaica (631-75 BC).....	18
2.4.5 Roman Period .....	18
2.4.6 Vandals & Byzantines .....	19
2.4.7 The Coming of Islam.....	19
2.4.8 Ottoman Rule .....	20
2.4.9 Italian Occupation .....	20
2.4.10 Independence period (1951-1969).....	21

## Table of Contents

2.4.11	<i>Al-Fatah Revolution: 1st September 1969</i> .....	21
2.5	THE LIBYAN ECONOMY BEFORE THE DISCOVERY OF OIL .....	23
2.6	THE OIL SECTOR AND THE ECONOMY .....	27
2.7	GROSS DOMESTIC PRODUCT (GDP).....	28
2.8	TRADE BALANCE .....	32
2.9	ECONOMIC DEVELOPMENT PLANS .....	35
2.9.1	<i>The First Socio-economic Plan (1963-1968)</i> .....	36
2.9.2	<i>The Second Five-Year Plan (1969-1973)</i> .....	37
2.9.3	<i>The Third Three-Year Development Plan (1973-1975)</i> .....	37
2.9.4	<i>The Fourth Five-Year Socio-economic Development Plan (1976-1980)</i> .....	38
2.9.5	<i>The Fifth Five-Year Socio-economic Development Plan (1981-1985)</i> .....	40
2.9.6	<i>Proposed Socio-economic Transformation Plan (1986-1990)</i> .....	41
2.9.7	<i>Proposed Socio-economic transformation Plan (1991-1995)</i> .....	42
2.9.8	<i>The Tripartite Programme (1994-1996)</i> .....	42
2.9.9	<i>Proposed Socio-economic Transformation Plan (2002-2006)</i> .....	42
2.10	CONCLUSION .....	45
<b>3</b>	<b>CHAPTER THREE .....</b>	<b>47</b>
	<b>THE LIBYAN OIL AND GAS SECTOR. ....</b>	<b>47</b>
3.1	INTRODUCTION .....	47
3.2	OIL AS A SOURCE OF WORLD POWER .....	48
3.3	HISTORY OF LIBYAN OIL AND GAS EXPLORATION AND PRODUCTION .....	48
3.3.1	<i>Oil Exploration and Discovering During 1952-1969</i> .....	49
3.3.2	<i>Discovery Activities from 1969 Until 1987</i> .....	51
3.3.3	<i>The National Oil Corporation and Oil Discovery</i> .....	52
3.4	OIL PRODUCTION.....	54
3.5	PROVEN CRUDE OIL RESERVES. ....	58
3.6	OIL EXPORT .....	59
3.7	GEOGRAPHICAL DISTRIBUTION OF THE LIBYAN OIL .....	65
3.8	NATURAL GAS .....	67
3.9	REFINING ACTIVITY .....	70
3.10	THE IMPACT OF THE INTERNATIONAL SANCTIONS (1992-1999) .....	72
3.11	CONCLUSION .....	80
<b>4</b>	<b>CHAPTER FOUR.....</b>	<b>82</b>
	<b>THE DETERMINANTS OF FDI: A THEORETICAL EXAMINATION.....</b>	<b>82</b>
4.1	INTRODUCTION .....	82
4.2	THEORIES OF FDI.....	84
4.2.1	<i>Markets and Market Power Approaches</i> .....	85
4.2.1.1	Factor Markets and Factor Costs.....	87
2.1.1.1	Market Size .....	94
2.1.1.2	Market Access.....	97
2.1.1.3	Markets: The Role of Government .....	98
2.1.1.4	Market Power.....	100
4.2.2	<i>Internalisation Approach</i> .....	103
2.1.2	<i>International Competition Approaches</i> .....	107
2.1.3	<i>Macroeconomic Developmental Models</i> .....	110
4.2.2.1	The Product Cycle Model .....	110
2.1.3.1	Dunning's Developmental Model .....	113
2.1.3.2	Theory of Comparative Advantage .....	116
4.2.3	<i>The Eclectic Paradigm: A Framework for Analysis</i> .....	118
4.3	SUMMARY: MOTIVATIONS FOR FDI.....	124
4.3.1	<i>Market Seeking FDI</i> .....	124
4.3.2	<i>Natural Resource Seeking FDI</i> .....	124



## Table of Contents

4.3.3	<i>Efficiency Seeking FDI</i> .....	125
4.3.4	<i>Strategic Asset or Capability Seeking FDI</i> .....	125
<b>5</b>	<b>CHAPTER FIVE</b> .....	<b>128</b>
	<b>FDI INFLOWS TO LIBYA: PAST, PRESENT AND FUTURE</b> .....	<b>128</b>
5.1	INTRODUCTION .....	128
5.2	TYPES OF FDI .....	128
5.3	THE FDI CATEGORIES IN TERMS OF CAPITAL FLOWS .....	129
5.4	THE GLOBAL SIGNIFICANCE OF FDI .....	130
5.5	SIGNIFICANCE OF FDI FOR DEVELOPING COUNTRIES .....	132
5.5.1	<i>Trends in Developing Countries</i> .....	133
5.6	BARRIERS TO FDI .....	137
5.7	CHANGES IN NATIONAL REGULATIONS TO ATTRACT FDI INFLOWS .....	138
5.8	HISTORICAL FDI INFLOWS TO THE LIBYAN OIL SECTOR.....	140
5.9	THE IMPORTANCE OF FDI INFLOWS TO LIBYA .....	144
5.9.1	<i>Advantages to invest in Libya</i> .....	147
5.10	PROSPECTIVE OIL AND GAS SECTOR.....	148
5.11	THE INDUSTRIAL AND MINERALS SECTORS .....	150
5.12	LIBYAN FOREIGN INVESTMENT LEGISLATIONS.....	151
5.13	THE ROLE OF THE LIBYAN GOVERNMENT IN PROMOTING FDI INFLOWS.....	154
5.14	POLICIES AND LEGISLATION NEEDED TO ENCOURAGE FDI TO LIBYA .....	157
5.15	OVERVIEW OF FUTURE DEVELOPMENT AND INVESTMENT IN LIBYA.....	161
5.16	CONCLUSIONS.....	171
<b>6</b>	<b>CHAPTER SIX</b> .....	<b>173</b>
	<b>RESEARCH METHODOLOGY AND DATA</b> .....	<b>173</b>
6.1	INTRODUCTION .....	173
6.2	DATA GATHERING TECHNIQUES.....	173
6.2.1	<i>The Questionnaire</i> .....	174
6.2.1.1	Detailed Analysis of Questionnaire by sector .....	177
6.2.1.2	Questionnaire Design.....	178
6.2.1.3	Questions Order .....	179
6.2.1.4	Question Scaling .....	179
6.2.1.5	Pilot Study.....	180
6.2.1.6	The Sample .....	185
6.2.1.7	Questionnaire Distribution, Follow-up and Collection .....	185
6.2.1.8	Response Rates .....	187
6.2.2	<i>Interviews</i> .....	189
6.2.3	<i>Published Official Data (Secondary Data)</i> .....	192
6.3	FIELD SURVEY RESULTS.....	195
6.3.1	<i>Questionnaires Results</i> .....	195
6.3.2	<i>Interview Results</i> .....	207
<b>7</b>	<b>CHAPTER SEVEN</b> .....	<b>211</b>
	<b>EMPIRICAL FINDINGS: ANALYSIS AND INTERPRETATIONS.</b> .....	<b>211</b>
7.1	INTRODUCTION .....	211
7.2	MODEL VARIABLES .....	212
7.2.1	<i>FDI inflows (FDI)</i> .....	213
7.2.2	<i>Extraction Cost (OILC)</i> .....	214
7.2.3	<i>Libyan Oil Prices (OILP)</i> .....	215
7.2.4	<i>Libyan Proven Crude Oil Reserves (OILR)</i> .....	216
7.2.5	<i>Libyan Real GDP</i> .....	218
7.2.6	<i>Libyan Government Spending (GS)</i> .....	218

## Table of Contents

7.2.7	<i>Nationalisation of Foreign Oil Companies (NAT)</i> .....	220
7.2.8	<i>The Country Wealth (CW)</i> .....	221
7.2.9	<i>UN Sanctions (1992-1999) (SAN)</i> .....	222
7.2.10	<i>World Crude Oil Prices (WP)</i> .....	223
7.3	TIME SERIES ANALYSIS .....	223
7.4	ECONOMETRIC MODEL AND DATA .....	226
7.4.1	<i>Stationarity Test: (ADF) Augmented Dickey-Fuller Unit Root Test</i> .....	228
7.4.2	<i>Cointegration Test</i> .....	229
7.4.3	<i>Stability Test</i> .....	232
7.4.4	<i>Normality Test</i> .....	233
7.4.5	<i>Elasticity Test: (Point Elasticity, E)</i> .....	233
7.5	CONCLUSION .....	235
<b>8</b>	<b>CHAPTER EIGHT</b> .....	<b>237</b>
	<b>OTHER DETERMINANTS OF FDI INFLOWS</b> .....	<b>237</b>
8.1	INTRODUCTION .....	237
8.2	OTHER ECONOMIC FACTORS .....	237
8.2.1	<i>Export and Import (Openness of Economy)</i> .....	238
8.2.2	<i>Exchange Rates</i> .....	239
8.2.3	<i>Interest Rates</i> .....	239
8.2.4	<i>Tax Considerations</i> .....	240
8.3	POLITICAL FACTORS .....	242
8.4	SOCIO-ECONOMIC FACTORS.....	243
8.4.1	<i>Transparency and Accountability</i> .....	245
8.4.2	<i>Administrative Structure</i> .....	247
8.4.3	<i>Corruption level</i> .....	250
8.5	LEGISLATION SYSTEM .....	251
8.6	PRIVATISATION .....	253
8.7	LIBERALIZATION.....	256
8.8	GLOBALIZATION .....	258
8.9	CONCLUSIONS.....	260
<b>9</b>	<b>CHAPTER NINE</b> .....	<b>261</b>
	<b>SUMMARY AND CONCLUSIONS</b> .....	<b>261</b>
9.1	SUMMARY AND CONCLUSIONS .....	261
9.2	POLICY IMPLICATIONS .....	267
9.3	JUSTIFICATION OF THE STUDY .....	273
9.4	SCOPE AND LIMITATIONS OF THE STUDY .....	274
9.5	SUGGESTIONS FOR FUTURE RESEARCHES .....	275
	<b>BIBLIOGRAPHY</b> .....	<b>277</b>
	<b>APPENDICES</b> .....	<b>305</b>
	APPENDIX 1: QUESTIONNAIRES TO FOREIGN OIL COMPANIES IN LIBYA.....	305
	APPENDIX 2: COPY OF THE INTERVIEWS QUESTIONS. ....	311
	APPENDIX 3: INVESTMENT LAW No.5 .....	314
	APPENDIX 4: INVESTMENT LAW No.7 .....	322
	APPENDIX 5: OFFICIAL LETTER FROM THE LIBYAN PEOPLE'S BUREAU (LONDON) TO CENTRAL BANK OF LIBYA (TRIPOLI) AND THE NATIONAL AUTHORITY FOR INFORMATION AND DOCUMENTATIONS. ....	324
	APPENDIX 6: OFFICIAL LETTER FROM THE LIBYAN PEOPLE'S BUREAU (LONDON) TO THE NOC (TRIPOLI) FOR PARTICIPATION IN THE SURVEY.....	325
	APPENDIX 7: OFFICIAL LETTER FROM THE NOC TO THE FOREIGN OIL COMPANIES FOR PARTICIPATION IN THE SURVEY.....	326

## Table of Contents

---

APPENDIX 8: OFFICIAL LETTER FROM LIBYAN STUDENTS UNION UK BRANCH TO THE NOC AND THE FOREIGN OIL COMPANIES FOR PARTICIPATION IN THE SURVEY.....	327
APPENDIX 9: OFFICIAL LETTER FROM THE LIBYAN MINISTRY OF HIGHER EDUCATION INTRODUCING AND RANTS ME AND MY SUBJECT TO THE ALL PARTICIPATORS, WHICH THEY MIGHT HELP.....	328
APPENDIX 10: LETTER TO THE LIBYAN PRIME-MINISTER. ....	329
APPENDIX 11: LETTER TO THE LIBYAN MINISTRY OF ECONOMY AND TRADE.....	330
APPENDIX 12: SANCTIONS AGAINST LIBYA. ....	331
APPENDIX 13: SOME RESULTS OBTAINED FROM THE QUESTIONNAIRE. ....	333
APPENDIX 14: APPLICATION FORM FOR FOREIGN INVESTORS TO INVEST IN LIBYA.....	339

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Introduction**

The Libyan economy remains largely state controlled and completely dependent on revenues from the export of crude oil and natural gas. Oil and gas revenues, on the other hand, depend heavily on the scale of activities of foreign oil companies (FOCs). FOCs have been attracted by the very high quality of the country's sweet crude oil and gas, the high levels of proven reserves of crude oil and natural gas, the market's close proximity to industrial European countries, and favourable extraction costs.

The Libyan oil industry is run by the state-owned National Oil Corporation (NOC) along with several international oil companies. International oil companies are engaged in exploration, drilling, production, development, consultation, marketing and service agreements with NOC. Despite almost half a century of exploration, Libya remains largely unexplored with vast reserves of oil and gas. Libya's intention is that foreign companies help to increase the country's oil production capacity from 1.4 million barrels per day at present to 2 million barrels per days over the next five years. Libya is actively courting foreign oil companies, and is considered a highly attractive oil and gas province.

There are three main reasons for embarking upon this research. First, the oil and gas sector is the most important sector in the Libyan economy (about 95% of Libya's hard

currency earnings). Second, on the subject of FDI, Libya still remains under-researched. There has been no published empirical study on FDI that focuses exclusively on Libya concerning the relationship between the macro indicators and FDI in the oil and gas sector. Third, as a source of capital, FDI offers employment opportunities, the training of local workers, enhancements from new technology, the use of local raw materials and facilities available to promote investment in the suburban areas of the country.

## **1.2 Purpose and Significance of the Study**

Over the past three decades, the study of foreign direct investment (FDI) has attracted many academic researchers and policy makers in different parts of the world. The FDI phenomenon is considered as multi-disciplinary, as it is interrelated with several social, political economy and management issues.

The main purpose of this study is thus to discover the main factors determining FDI inflows to the Libyan oil sector. However, the significance of this study as follows:

1. No previous study has investigated and analyzed the factors that determine FDI inflows to the Libyan oil sector.
2. The research is new for Libya based on conducting a questionnaire and interview survey of FOCs in the Libyan oil sector. It is hoped that the findings will be of value in providing a basis for identifying and assessing the determinants of FDI inflows to the Libyan oil sector and thus help in shaping future policies towards it.

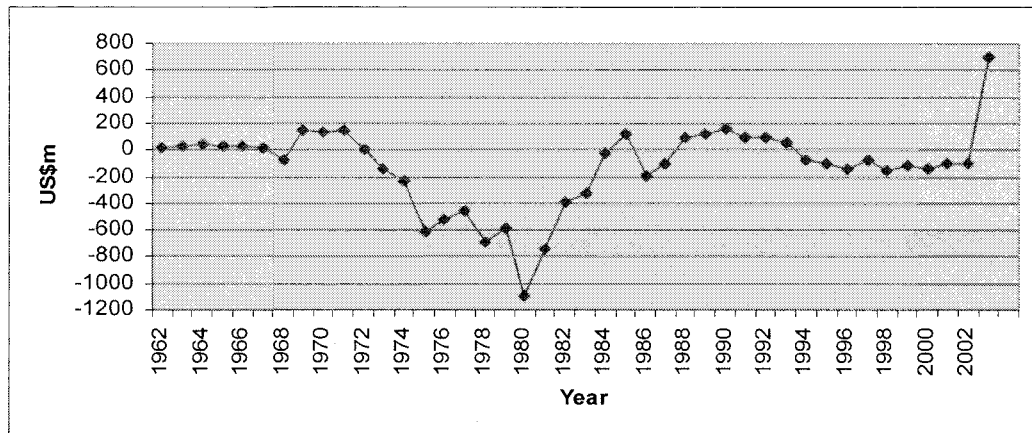
3. Determine the recent possible impact of FDI on the Libyan oil and gas sector, to provide a better understanding and to define the factors which attract FOCs to invest in the Libyan oil and gas sector.
4. Define and reveal the recent perceptions of foreign oil investors with regards to the foreign direct investment system in the Libya oil and gas sector.
5. Reveal the barriers to FDI in the Libyan oil and gas sector.
6. Extract from the findings of this study, conclusions and recommendations that might be adopted by the Libyan government and other decision makers to stimulate higher levels of FDI inflows.

### **1.3 The Research Problem**

Attracting FDI inflows to host countries has been the subject of much research over recent decades. However, in the case of Libya, the inflow of FDI has been insignificant over the period of the study. Libya places great importance on foreign capital in the oil sector as a critical element of economic growth. However, in spite of efforts to attract foreign oil investors, the Libyan share of world investment inflow is still very low (UNCTAD, 2000).

Figure 1.1 shows that the FDI inflows to the Libyan oil sector were low in the beginning of 1962 and continued a sharply decline until the end of the 1970s. In the 1980s, FDI inflows then increased gradually, and were more stable during the 1990s but were sometimes less than zero.

**Figure 1.1: FDI inflows to the Libyan oil sector.**



Sources: IMF, International Financial Statistics Yearbook 1981 & 2004.  
UNCTAD, World Investment reports 1992 & 2004.

## 1.1 Research Objectives

The study presents a survey of the literature on the conceptual and operational definitions of FDI for a better understanding of the factors behind FDI inflows to the Libyan oil sector. Thus, this study concentrates on the variables which determine FDI inflows to the Libyan oil sector. In this regard, three objectives are set out for the study.

1. To examine the theoretical foundations of FDI and its determinants in a small economy.
2. To critically investigate and analyse factors determining FDI inflows to the Libyan oil sector.
3. To evaluate the validity of the empirical findings and to draw policy implications based on this investigation.

## **1.5 Methodological Aspects**

This study is primarily country specific research relating to FDI and its determinants in the oil and gas sector.

### **1.5.1 Primary Data.**

The time series data published by different agencies will offer aggregate values of FDI. In order to supplement this information, interviews and questionnaire were developed. Such data were collected through face-to-face interviews and questionnaires directed to foreign oil investors in Libya and government agencies, aimed at providing detailed characteristics of FDI providers. This method were employed rather than postal or telephone survey due to its value in generating high response rates, ensuring consistent questionnaire completion techniques, and recording comprehensive and accurate information. The information gathered from the survey provides further policy implications to be drawn from the findings derived from the time series model.

### **1.5.2 Secondary Data**

A large macro data set was used to examine the factors determining FDI inflows to the Libyan oil sector. Annual data has been used, covering the period from 1962 until 2003. A time series econometric model using Eviews software for data analysis provides us with the main policy instruments. The secondary data was collected from both national and international sources.



## **1.6 Research Assumptions**

Having stated the main purpose of this study and its objectives, it may be useful to indicate some primary assumptions of this research:

1. It is assumed that increased FDI inflows into Libya could act as promotion of higher rates of growth and make it more competitive.
2. The study looks at the determinants rather than the effects of FDI.
3. The study will focus on FDI inflows to the oil and gas sector, particularly with regards to FOCs investments from 1962 until 2003.
4. Indirect investment, portfolio investment, and other purely financial flows will not be considered in this study.
5. The population sample frame for this study constitutes all FOCs operating in Libya.

## **1.7 Contributions of the Study**

This study focuses on the determinants of FDI inflows to the Libyan oil sector. It seeks to investigate Libyan FDI inflows to the oil sector over the period from 1962 until 2003. Therefore, this study will be expected to be of real value to various parties, such as the Libyan oil company (NOC), the Libyan government, foreign investors in the oil sector and researchers in relevant fields.

### **1.7.1 Contributions to the Literature**

As Libya is one of the developing countries, the research will add new knowledge to the literature regarding the subject of FDI inflows to developing countries (Libyan experience).

### **1.7.2 Contribution to the Libyan Government**

A recent aim of the government is the diversification of national income. Therefore the government has established many regulations and investment laws to attract more foreign investors in the economy in general, and in the oil sector in particular. The government needs studies such as this to:

- 1- Identify the main negative impacts of FDI;
- 2- Choose the appropriate approaches to FDI regulation in order to attract more foreign oil investors;
- 3- Recognize weak points in the Libyan FDI system in general and in the oil sector in particular;
- 4- Extract from the study those results, conclusions and recommendations that might be adopted in order to stimulate higher levels of FDI inflows.

### **1.7.3 Contributions to the Libyan Oil Sector (NOC)**

The study will be of great contribution to management of the Libyan oil sector in the following ways:

- 1- By highlighting and analyzing FDI inflows to the Libyan oil and gas sector;
- 2- By giving effective tools in order to identify the main factors determining FDI in the Libyan oil and gas sector.

### **1.7.4 Contributions to FOCs in Libya**

There is a shortage of data and information about the nature and characteristics of the Libyan FDI system, especially after the UN sanctions from 1992 to 2000. The study

will be useful as a guide for foreign oil investors in Libya. Moreover, all the FOCs representatives were keen to have copy of the study results.

#### **1.7.5 Contributions to Foreign Oil Investors**

For any potential foreign investors who would like to know more about the conditions and environment for investment in Libya, and those who are planning to invest in Libya, the study will give more information and details about the Libyan oil sector and the Libyan FDI environment and system.

#### **1.7.6 Contributions to Researchers**

As a reference or guide to FDI as a new subject in Libya, a search of the literature to date reveals that no comprehensive research has been conducted in the area of the determinants of FDI in the Libyan oil and gas sector. The study is definitive in encompassing the operational characteristics of major foreign companies within the Libyan economy, and will be of benefit to all researchers in this area.

### **1.8 Outline of the Thesis**

The thesis consists of nine chapters. The present chapter has described the problem of attracting FDI, definitions, objectives, methodological aspects, contribution of the study, and limitation of the study. Chapter Two, considers an overview of the Libyan economy included physical features, main aspect of economic development, economic planning and capital accumulation. Chapter Three, concerns with the Libyan oil and gas sector indicators, the period before oil discovered, development of oil production, the

domination of the oil sector. Chapter Four, deals with the theories of FDI, literature review, the classical theories, neo-economical, capital theory, international trade theory and FDI, types of FDI and their characteristics. Chapter Five, deals with FDI inflows to Libyan past, present and future. Environment for foreign oil investment, foreign oil and gas companies investing in Libya, historical background, nature, and roles, aspect of economic impacts, Libyan foreign investment policy, promoting FDI in the oil and gas sector. Chapter Six, will present methodological aspects, data collection methods, the respondents, independent variables and their definitions, and data analysis. Chapter Seven, shows empirical findings: explains and justifies the analyses and Interpretations, discussion of preliminary results, discussion of main findings, and interpretations of empirical results. Chapter Eight, discusses other factors, which affect FDI inflows including economic, social, political, globalization, privatization, legalization, etc. Finally, Chapter Nine, provides the summary and conclusions, suggestions and recommendations, suggestions also are made for future research.

## **CHAPTER TWO**

### **AN OVERVIEW OF THE LIBYAN ECONOMY**

#### **2.1 Introduction**

In recent years, Libya and many other developing countries have faced an externally difficult problem. Their main difficulty in initiating and sustaining economic growth is not capital shortage. Capital and foreign exchange are continuously earned and accumulated in those countries as a result of the discovery and exporting of oil, especially, in recent years. The economic and social development was not as impressive as it should be. There is no denying the fact that, in terms of economic growth (as reflected in GDP and per capita income), Libya has made an impressive progress in the last thirty years. The availability of increasing oil revenues in the short run has solved the financial side of sustained economic and social development (Anderson, 1987).

The objective of this chapter is to summarize the main features and criteria of the Libyan economy, and also to analyse the trends in economic development in the Libyan economy during the study period. In addition this chapter compares and contrast the different periods of economic development, highlighting the role of the oil sector in the Libyan economy.

## 2.2 Geography and Climate

The official name of Libya is The Great Socialist People's Libyan Arab Jamahiriya. Figure 2.1 illustrates Libya's strategic location in the middle of North Africa and linking the Arab countries of North Africa with those of the Middle East. Also the country links the Mediterranean countries and those of Saharan Africa, and it lies opposite the major southern European countries. Libya is bounded by the Mediterranean Sea, with a coastline of about 2000 km in length on the northern side. This is one of the longest Mediterranean coastlines, and it affects the climate of the northern part of Libya. Libya is bounded also by borders with six countries, Egypt and Sudan to the east, Algeria and Tunisia to the west, and Chad and Niger to the south side (Alqadhafi, 2002).

Figure 2.1: Libyan's geography position.



Source: World Atlas, 2003.

The total area of Libya is about 1,750,000 square kilometres. Libya is the fourth largest country in Africa and covers an area equal to over half the size of Europe. It is the fifteenth largest country on the world. Due to the lack of natural barriers, the climate is greatly influenced by the desert to the south and the Mediterranean to the north. The coastal regions have a Mediterranean climate with moderate temperatures and enough rain during the winter months for grain production. Much of the rest of the country is semiarid, with frequent periods of drought in the southern deserts. Summer is generally very hot, with average temperatures on the coast of around 30°C often accompanied by high humidity. In the south temperatures are higher than in the northern region and it can reach 51°C. In the winter season, the weather can be cool and rainy on the coast, and in the south temperatures can drop to below zero at night. Southern Libya may receive less than 100mm of rain during the whole year.

### **2.3 Population**

El Fathalyn and Palmner (1980) explained that Libyans are primarily a mixture of Arabs as the majority, Berbers, Tebou, and Touareg tribal groups in southern Libya are nomadic or semi-nomadic people. Among foreign residents, the largest groups are Egyptians (estimates range from 400,000 to 1 million), Tunisians (40,000), Turks, Pakistanis, Indians, Sudanese, Moroccans, Jordanians, South Koreans, and Thais. Other foreign residents include 70,000 from Eastern Europe and 40,000 from Western Europe.

Table 2.1 shows that, at the 1962 census, Libya had a population of 1.450 million. The total population then increased more than three fold by 2003, with an estimated

population then of 5.980 million. This population, however, is unevenly distributed; more than two-thirds live in the more densely settled coastal areas. About 17% of the population consists of foreign workers and their families. Some 86% live in urban areas, although some Libyans still live in nomadic or semi-nomadic groups. The total labour force increased more than four times during the period of the study from 1962 to 2003. At the 1962 census, the size of the foreign labour force was 16,000, and this number increased through the years to 188,000 in 2003, which is about 12 times higher.

**Table 2.1: Population and labour force, in millions (1962-2003).**

Year	POPULATION			LABOUR FORCE		
	LIBYAN	FOREIGN	TOTAL	LIBYAN	FOREIGN	TOTAL
1962	1.402	0.048	1.450	0.340	0.016	0.356
1965	1.563	0.056	1.619	0.353	0.019	0.372
1970	1.563	0.056	1.619	0.353	0.019	0.372
1975	2.221	0.224	2.445	0.454	0.223	0.677
1980	2.730	0.313	3.043	0.533	0.280	0.813
1985	3.356	0.390	3.746	0.690	0.205	0.895
1990	4.124	0.278	4.402	0.879	0.139	1.018
1995	4.403	0.409	4.812	1.025	0.161	1.186
2000	5.017	0.623	5.640	1.257	0.188	1.445
2003	5.285	0.695	5.980	1.312	0.301	1.613
Average	3.17	0.31	3.48	0.72	0.16	0.87
St.dev	1.48	0.23	1.70	0.38	0.11	0.45
C.V.	0.47	0.74	0.49	0.52	0.69	0.51

Note: St.dev = Standard Deviations. C.V. = Coefficient of Variation.

Sources: Arab Monetary Fund, 2004. Ministry of Planning and development, 2004.

The population of Libya is exceptionally young and is growing at a rapid pace. Estimates placed those under the age of fifteen at up to half the total population. Based on the results of the 1984 census, the United Nations (UN) placed the annual rate of increase for the 1980-1984 period at an extremely high 4.5%, but the Central Bank of Libya placed the figure at 3.9% annually for nationals only. Official sources put the



average annual growth rate for the 1970-1986 period at 4%, a figure that agreed with World Bank data; the bank projected that this rate would prevail until the year 2003, when Libya's population would total 5.98 million (Metz, 1989).

As a consequence of its small population and workforce, Libya has had to import a large number of foreign workers. Expatriate workers, most of them from nearby Arab countries, flowed into Libya after the discovery of oil. There were about 17,000 of these in 1964, but the total had risen to 64,000 by 1971 and to 223,000 in 1975, when foreign workers made up almost 33% of the labour force. The official number of foreign workers in Libya in 1980 was 280,000 falling to about 200,000 in 2000 (Lycett, 1990)

In 1980 fewer nationals were found in construction work, where they numbered almost 130,000 or 46% of those employed, according to official statistics. Their numbers in such work were expected to decline after the mid-1980s, at the same time that ever-larger numbers of foreigners were expected to fill jobs in manufacturing, where they constituted more than 8% of the 1980 labour force. Significant numbers of expatriates were found in agriculture (8%) and education (10%) as well. Few were employed in the oil sector, only 3,000 or 1% of all foreign workers in 1980 (Beschoner and Smith, 1991).

In 1983 there were more than 560,000 foreigners resident in Libya, at about 18% of the total population, according to the Secretariat of Planning. By far the most numerous were Egyptians (174,000) and Tunisians (73,600); the largest Western groups were Italians (14,900) and British (10,700). During 1984, however, a large portion of the

foreign workforce departed as a result of restrictions on the repatriation of earnings. The number of resident foreigners thus declined drastically in the mid-1980s. The exact dimensions of the decline as well as its impact upon the country, however, remain unclear. Minimum estimates of the number of non-nationals still in Libya in 1987 ranged upward of 200,000, a reasonable figure given Libya's dependence upon imported labour for essential skills and services (Metz, 1989).

**Table 2.2: Population density of Libya and selected developing countries.**

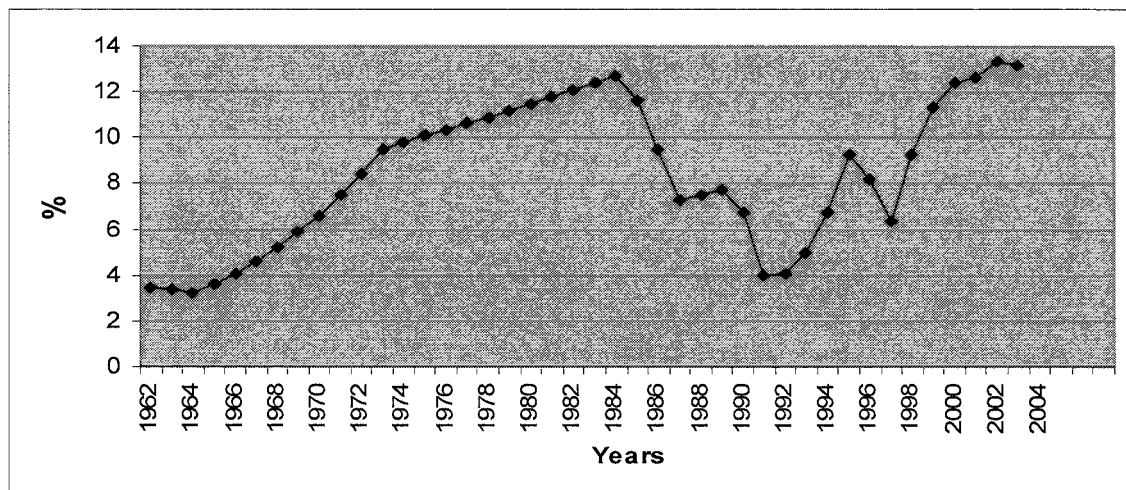
Country	Area (sq.km)	Population (m) Year 2000	Density (per sq.km)	Population Growth %
Libya	1,750,540	5.64	3	4.60
Egypt	1,002,000	63.31	63	2.15
Tunisia	155,566	9.56	61	1.18
Algeria	2,381,741	30.73	13	1.55
Morocco	710,850	28.73	40	1.70
Kuwait	17,818	2.23	125	1.61
Saudi Arabia	2,250,000	22.03	10	3.24
Lebanon	10,452	3.77	36	1.62
Nigeria	923,770	127.22	138	2.1
Brazil	8,511,968	173.46	20	1.4

Sources: UNCTAD, Handbook of International Trade and Development Statistics, 2000.  
-IMF, Annual Report, 1998.

Table 2.2 shows that in comparison with other Arab Countries, the Libyan population is very small compared with the size of the country. Although Libyan population density is very small (3 persons per one square kilometre) compared with other countries, on the other hand it is clear that the population's annual growth 4.6% is higher than in many Arab and developing countries.

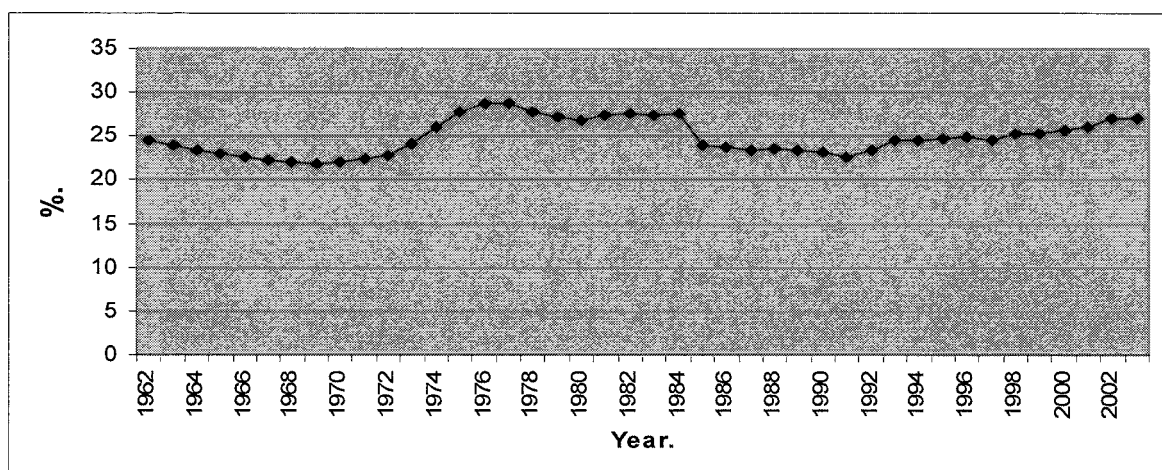
Islam is the state religion, and about 99% of all Libyans are Sunni Muslim. Arabic is the official language, although Berber is sometimes spoken and English and Italian are used in trade.

**Figure 2.1: Percentage of the Foreigners in the Libyan Population.**



Sources: Arab Monetary Fund, 2004. Ministry of Planning and development, 2004.

**Figure 2.2: Percentage of Labour force to the population.**



Sources: Arab Monetary Fund, 2004. Ministry of Planning and development, 2004.

## **2.4 Historical Background**

In analysing any country it is important to consider the historical processes responsible for shaping the country's political, economic, and cultural development. This is particularly paramount when dealing with underdeveloped nations. Libya, like so many third world countries, is still struggling with her past.

### **2.4.1 Pre-history:**

The earliest evidence of lasting or semi-permanent settlements in Libya dates from 8000 BC. Rock paintings in the Jebel Acacus and Wadi Methandoush area in Libya are the greatest source of knowledge about the wide life at that time.

The name of "Libya" has existed for more than two thousand years, going back to the time of the Phoenicians. The Phoenicians founded colonies on the coast of Tripolitania, which were conquered by Carthage in the 6th century BC. Greeks subsequently established settlements in Cyrenaica. The Greek historian Herodotus, writing in the 5th century BC, described the Garamantes people of the Fezzan, who were sedentary farmers and used horse-drawn chariots in warfare.

### **2.4.2 The Phoenicians in Tripolitania (1000-201 BC)**

The Phoenicians Empire, had its origins and base in the Levantine ports of Tyre. Phoenicians were a seafaring people renowned for their trading activities. By the 12<sup>th</sup> century BC, Phoenician traders were active throughout the Mediterranean. Arriving regularly on the Libyan coast by 1000 BC. After around 700 BC, they needed permanent settlements to facilitate their trade in gold, silver, raw metals. They established Lebda

(Leptis), Oea (Tripoli), Sabratha and other ports on to the Mediterranean Sea each was small but formed an essential link in a chain of safe ports from the Levant to Spain.

#### **2.4.3 The Garamantion Empire of the Fezzan (900 BC-AD 500)**

As part of the first indigenous empire of significance in Libya, the Garamantes have become a people of legend, seen alternatively as wild and warlike. Most historians agree that the Garamantes were one of the most advanced and forward thinking peoples of their time. Due to its location in the central Sahara, the Garamantes civilisation exercised significant control over the ancient caravan routes across the desert with strong links to Egypt and sub-Saharan Africa. Salt was exchanged for gold and slaves in a lucrative trade.

#### **2.4.4 The Greeks in Cyrenaica (631-75 BC)**

Greeks established the city of Cyrene, Barce (Al-Marj), Tocra, Ptolemais (Tolmeita) and Apollonia (the port for Cyrene). North Africa became so significant that by around 500 BC the Greeks divided the world into three parts, Asia, Europe and Libya. In the economic sphere, the fertile slopes of the Jebel Akhdar provided Greece with valuable grain, wine, wool, livestock and a herb from the silphium plant, which was unique to Cyrenaica. Cyrene also become one of the Greek world 's premier intellectual and artistic centres, producing and exporting some of the finest scholars of the age (Ham, 2002).

#### **2.4.5 Roman Period**

After the final defeat of Carthage in the Punic wars, the Romans assigned Tripolitania to their ally, the Berber king of Numidia. In 46 BC, Julius Caesar deposed the final

Numidian king, Juba I, Who had sided with pompey, a general in the Roman army and a rival of Caesar in the civil Wars of Rome. Communications between Tripolitania and Cyrenaica were hampered by rebellions along the southern coast of the Gulf of Sirt, however, by the end of the 1st century AD Tripolitania was a major sources of olive oil for Roman manchents and also operated as an entrepot for gold and slaves brought to the coast by Berbers and the Garamantians. Cyrenaica was equally prized, because under Greek rule, it become a source of wine, silphium and horses. A Libyan even became emperor of the Roman Empire. Septimus Severus was known as the Grim African (Ham, 2002)

#### **2.4.6 Vandals & Byzantines**

In AD 429, a rebellious Roman official invited the Vandals, a Germanic tribe, to Libya in an attempt to gain leverage with the authorities in Rome. Faced with no choice, the Romans recognised the Vandal ascendancy as long as Libya's civil administration had remained unchanged. In 533 AD, the Byzantine army general Belisarius captured Libya for the emperor Justinian. Byzantine control was limited to the cities of the coast.

#### **2.4.7 The Coming of Islam**

In 642 AD the Arab horsemen first crossed into Cyrenaica. Under Amer ibn al-As, the armies of Islam conquered Cyrenaica, and by 643 AD Tripoli had also succumbed. Despite the rapid success enjoyed by the forces of Islam in religious and military terms, the social characters of Libya became mixed between Arabs and Berbers. In 1158 AD, the supporters of the Almohad dynasty arrived in Tripoli from Morocco and established their authority.

#### **2.4.8 Ottoman Rule**

In 1551, the Ottomans arrived to occupy Tripoli, they saw little reason to reign in the pirates, preferring to profit from the booty. The French, Dutch and British navies all bombarded Tripoli to warn off further robbery on the high seas, but the Turks saw the pirates as a second column in their battle for naval supremacy, as long as they controlled the ports of Algiers, Tripoli, and Tunis. Under the Ottomans, the Maghreb was divided into three provinces: Algiers, Tripoli, and Tunis. In 1711, Athmed Karamanli, an Ottoman cavalry officer and son of a Turkish officer and Libyan woman, seized power and founded a dynasty which would last 124 years (Ham, 2002).

#### **2.4.9 Italian Occupation**

On 3 October 1911, the Italian Army attacked Tripoli, claiming somewhat disingenuously to be liberating Libya from Ottoman rule. As argued by Majid Khadduri (1968), the Libyan population was unimpressed and refused to accept another occupying force. Therefore, the Italian occupiers faced many battles with the Libyan population wherever they arrived during the occupation. The strongest voices of Libyan dissent came from Cyrenaica Omar al-Mukhtar, who became the leader of the uprising. In 1934 Italian control extended into the Fezzan, and in 1938-1939 Mussolini sought to fully colonise Libya, introducing 30,000 Italian settlers, which brought their numbers to more than 100,000. These settlers were shipped primarily to Sahel al-Jebel Akhdar Cyrenaica, and given land from which the indigenous inhabitants had been forcibly removed. During almost three decades of Italian occupation, a quarter of Libya's population died.

#### **2.4.10 Independence period (1951-1969)**

Libya achieved her independence on the 24th of December 1951, after years of local resistance to the Italian occupation and years of political work locally and internationally following Italy's defeat in World War II. In 1953, the Libyan government signed a treaty with the British government which allowed Britain to maintain military bases on Libyan soil for 20 years in return for annual aid of around £1 million. The following year, a similar agreement was signed with the USA who agreed to pay \$40 million over the same period. Libya also forged links across the Mediterranean, signing a friendship pact with France in 1955 and a trade agreement with Italy in 1957. In June 1959 an oilfield was discovered at Zelten in Cyrenaica.

#### **2.4.11 Al-Fatah Revolution: 1st September 1969**

On 1<sup>st</sup> September 1969, twenty-seven-years-old colonel Muammar Al-Qadhaffi overthrew the Sanusi monarchy. The leader of the revolution and his companions amounted to about seventy young army officers and enlisted men, mostly assigned to the Signal Corps, who seized control of the government and at a stroke abolished the old Libyan monarchy (Bearman, 1986).

Analysts were quick to point out the striking similarities between the Libyan military revolution of 1969 and that in Egypt under Nasser in 1952, and it became clear that the Egyptian experience and the charismatic figure of Nasser had formed the model for the Free Officers Movement. In the last months of 1969 the Revolutionary Command Council (RCC) moved vigorously to institute domestic reforms, and it proclaimed neutrality in the confrontation between the superpowers and opposition to all forms of



colonialism and imperialism. It also made clear Libya's dedication to Arab unity and to the support of the Palestinian cause against Israel. The RCC reaffirmed the country's identity as part of the "Arab nation" and its state religion as Islam. It abolished parliamentary institutions, all legislative functions being assumed by the RCC, and continued the prohibition against political parties, in effect since 1952. The new regime categorically rejected communism--in large part because it was atheistic--and officially espoused an Arab interpretation of socialism that integrated Islamic principles with social, economic, and political reform.

Libya had shifted, virtually overnight, from the camp of conservative Arab traditionalist states to that of the radical nationalist states. Riding on the wave of anti-imperialism, the new revolution's leader made his first priorities the closing of British and American military bases, and the expansion of the Libyan armed forces. Banks were nationalised and foreign oil companies (FOCs) were threatened with nationalisation. All assets in Libya belonging to Italians and non-residents were expropriated, and close to 30,000 Italian settlers were deported.

In 1982, the United States imposed an embargo on Libyan oil imports. In 1984, the British government severed diplomatic relations with Libya after the killing of a policewoman in front of the Libyan People's Bureau in London. In 1986, the US accused Libya of involvement in Palestinian attacks at the Rome and Vienna airports in December 1985. Also, the US accused Libya again of involvement in the 5th April bomb explosion in a Berlin nightclub frequented by US soldiers.

In 1997, with international support for the embargo waning, cracks began to appear in the previous international unity. South Africa President Nelson Mandela flew into Libya in defiance of the ban with a number of Africa leaders. In early 1999 a deal was brokered, with the international community accepting the procedural proposals that Libya had effectively been making since 1992. The Lockerbie suspects were then handed over to the UN for trial in the Netherlands, after which UN sanctions were immediately suspended, although unilateral US sanctions still remained. Finally, Libya sent a letter to the UN accepting responsibility for the Lockerbie case and paid \$2.7 billion as compensation to the victims' families as part of a deal to lift United Nations sanctions over the bombing of the Pan Am flight in 1988. Libya also agreed to pay compensation to the French victims' families for the UTA airline crash over Niger and to Germany. As a consequence UN sanctions were completely lifted.

The European governments made a beeline for Tripoli, keen to re-establish diplomatic and economic ties. By this stage, Libya was well on the road to re-joining the international community.

## **2.5 The Libyan Economy before the discovery of Oil**

Before oil was discovered there, Libya was one of the poorest and most backward countries in the world. Afterwards, the country still faced a lack of human and financial resources and institutions.

British Administration officials in 1952 estimated the income per head in Tripoli area at \$30 to \$40 per year (Segal, 1974). This income was subject to fluctuation; it tended to go up in good crop years and down in drought years. With per capita incomes of less than \$40 per year, one would expect levels of nutrition and health to be very low. In 1952, Libya's birth rate was 5.3% per year. The natural rate of population growth was kept down to 1.1% by a death rate of 4.2%, which reflected extremely low health standards.

As illustrated in Table 2.3, Libyan exports and imports during the 1950s (representing the economic situation during the British and French period) were characterised by increasing deficits. Agricultural products such as groundnuts, almonds, olives and potatoes were the main export items. The main imported items were raw materials, fuel, manufactured goods and foodstuffs. Table 2.3 shows a gradual increase in the deficit despite increasing exports. In 1950 exports (mostly agricultural) reached their then-customary total of LD 3.780 million. Imports totalled LD 6.983 million. This result was an unfavourable trade balance, to which was added a negative balance on the service account. The combination was barely offset by sizable grant aid from Britain, the UN, the United States, and Italy. Capital movements were minimally favourable on balance.

**Table 2.3: Libyan trade balance, in US\$ m.**

Year	Total Imports	Total Exports	Trade Balance
1950	19.55	10.58	-8.97
1951	33.71	13.22	-20.50
1952	32.59	12.46	-20.13
1953	31.81	9.74	-24.86
1954	31.35	10.75	-20.61
1955	40.26	12.86	-27.40
1956	46.48	11.63	-34.85
1957	78.61	15.16	-63.45
1958	96.60	14.21	-82.39
1959	113.64	12.04	-101.60
1960	169.08	11.29	-157.79

Source: Central Bank of Libya, 1, (1967), Table 21.

As Table 2.4 shows, in 1958 the agriculture sector was the main sector in the economy, and it contributed about 26.1% of the GDP. The industrial sector represented 11%. However, by 1958, the value of the industrial sector had reached about LD 15695, of which 61% was from manufacturing.

**Table 2.4: Libyan GDP at constant factor costs, in US\$m, in 1958.**

Sector	Value (in million)	Share (%)
Agriculture, Forestry & Fishing	38.08	26.1
Petroleum, Mining & Quarrying	10.08	6.9
Manufacturing & Repairing	16.80	11.5
Construction	5.04	3.4
Electricity, Gas & Water	2.24	1.5
Transport & Communication	8.12	5.6
Wholesale & Retail Trade	20.44	14
Banking, Insurance & Social Services	26.60	18.2
Public Administrative Services	18.76	12.8
<b>Total</b>	<b>146.16</b>	<b>100</b>

Source: The Economic Development of Libya, 1960, p. 294 (in Arabic).

Table 2.5 shows that the main 1958 exports of the country were agricultural products, livestock and fish, and number of employees.

**Table 2.5: Value and number of employees in the Libyan economy 1958.**

<b>Sector</b>	<b>Value L.D 1.000</b>	<b>% of Total</b>	<b>Number of Employees</b>	<b>% of Total</b>
Crude Oil & Natural Gas	3449	36.1	3254	19.5
Mining & Quarrying	120	1.3	400	2.4
Food, Soft Drink & Tobacco	2932	30.7	4272	25.7
Textiles, Clothing & Footwear	654	6.8	2255	13.5
Woodworks & Furniture	283	3.0	899	5.4
Paper, Printing & Publishing	232	2.4	374	2.2
Leather & Rubber	79	0.8	190	1.1
Chemical and Non-Metallic Products	178	1.9	526	3.2
Basic Metals	1150	12.0	4137	24.8
Other	480	5.0	344	2.1
<b>Total Manufacturing</b>	<b>9557</b>	<b>60.9</b>	<b>16651</b>	<b>62.7</b>
Mining & Quarrying	3569	22.7	3654	13.7
Construction	1808	11.5	5244	19.8
Electricity	761	4.9	1008	3.8
<b>Total Industrial Activities</b>	<b>15695</b>	<b>100</b>	<b>26557</b>	<b>100</b>

Source: Ministry of National Economy, Statistical Abstract 1964.

No real industrial sector existed in Libya before the Italian occupation in 1911. The industries that were established by the Italians were based on agriculture or on the breeding and utilization of marine products. Under ideal conditions, the presence of Italian modern sector could have been a positive influence on Libya's development through providing a demonstration effect for Libyan entrepreneurs.

After almost three thousand years of foreign domination and due to the general acceptance of a rigid social system, the country was very ill-equipped to solve the many problems of economic growth and sustained development, until the discovery of oil in the late of 1950s and early 1960s. The main features of the Libyan economy included a very low per capita income, deficits in government budgets and balances of payments, high rates of illiteracy, a high degree of resource immobility, on unequal distribution of income and wealth, a stagnant agricultural sector, and the low productivity of labour.

Furthermore, at the time of independence, Libya did not have the stock of human capital to launch the economy on a path of self-sustaining growth. Not only was the stock of human capital deficient, but there was also a lack of educational institutions to augment the supply of manpower resources. Some of the human resource problems were inherited from the past, but many of them related to social and cultural factors which inhibited the proper utilisation of existing resources and production of new resources (Elmaihub, 1981).

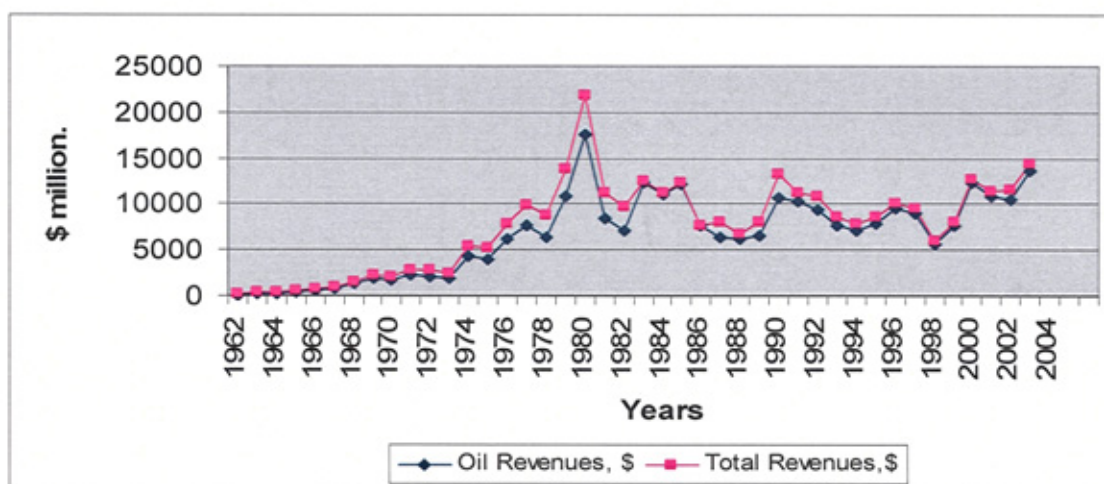
## **2.6 The Oil Sector and the Economy**

Allan (1983) argues that, until the discovery of oil at the end of 1950s, and the exporting of the first shipment of Libyan crude oil in September 1961, there was no economic sector in Libya with adequate production and visible resources that could have been expected to raise the standard of living and foreign trade imbalances. In 1962, this situation had changed dramatically and since then profound structural changes have taken place in all fields: economic, political, and social.

The growth rate was one of the highest in the world. The GNP had increased at an average of 20%, and the GDP increased at an average rate of 22.6%. Furthermore, gross fixed investment had increased at an average of 15.6% with the share in non-oil GDP reaching 63%. During the 1980s, oil accounted for two-thirds of the national income and nearly 99% of export earnings, although it employed about 10% of the labour force. The government exerts strong control over the economy. The petroleum industry was nationalized in the 1970s; state trade unions and industrial organizations run most other

industries and utilities. To reduce the country's heavy dependence on oil as shows in Figure 2.4, economic policy has emphasized agricultural and industrial development. Declining oil revenues during the 1980s, however, led to frequent revisions and delays in planned developments. In 1988, domestic reforms liberalized economic policy and encouraged private enterprise (Jahangir, 1982).

**Figure 2.4: Oil Revenues and Total Revenues, US\$m.**



Source: Central Bank of Libya, 1975, 1980 and 2004.

## 2.7 Gross Domestic Product (GDP)

Table 2.6 demonstrates, the agriculture sector contributed about 2.6% of gross domestic product in 1970, which increased to 9.6% in 2000. Climatic conditions and poor soils severely limit agricultural output. Libya imports about 75% of its food requirements. In addition, there was no basis for large-scale industrial development in Libya until the years after oil discovery, mainly because of the small and illiterate population of the country. A large number of small factories were established for manufacturing

agriculture products and those of other small industries. In fact most of these industrial units were owned by Italians and managed by them (Joffe and McLachlan, 1982).

**Table 2.6: Libyan GDP at current prices, US\$ millions (1962-2003).**

YEAR	Agriculture	Oil	Manufacture	Construction	Service	GDP
1962	53.21	137.86	32.14	36.79	295.36	555.36
1965	90.00	968.21	45.00	124.64	529.64	1757.50
1970	118.21	2908.21	80.36	313.57	1180.71	4601.07
1975	244.00	5768.00	254.00	1279.00	3263.00	10807.00
1980	469.12	19441.18	700.59	2667.94	6901.18	30227.35
1985	832.94	9840.88	1073.82	2707.35	9222.06	23677.06
1990	1751.43	6577.14	1842.86	3445.71	12911.43	26528.57
1995	2665.71	7408.57	2317.14	1365.71	15637.14	29394.29
2000	3350.98	9988.24	2019.61	1572.55	17970.59	34901.96
2003	1064.04	12206.19	591.42	1026.06	348.96	21660.17
Average	1039.81	6953.42	870.55	1327.31	6502.97	17341.14
S.dev.	1186.10	6214.87	898.69	1256.51	7038.30	13931.67
C.V.	1.14	0.89	1.03	0.95	1.08	0.80

Sources: Arab Monetary Fund. Central Bank of Libya. International Financial Statistics, Yearbook 2004.

The oil revenue affected the industrial sector in different ways, increasing industrial production, and in the contribution to the country's GDP. The oil sector contributed almost 63% of gross domestic product in 1970, which had decreased to about 30% by 2000. The total contribution of the services sector was about 26% in 1970, increasing to 51% in 2000. The gross domestic product at factor cost at current prices was LD 1,288.3 million in 1970, and this increased about 14 fold to LD 17,451 million in 2000. Per capita income increased from LD 65.0 in 1970 to LD 309 in 2000.

Because of Libya's great dependence on oil revenues, the general level of the Libyan economy is closely related to the health of the petrochemicals industry. Despite massive

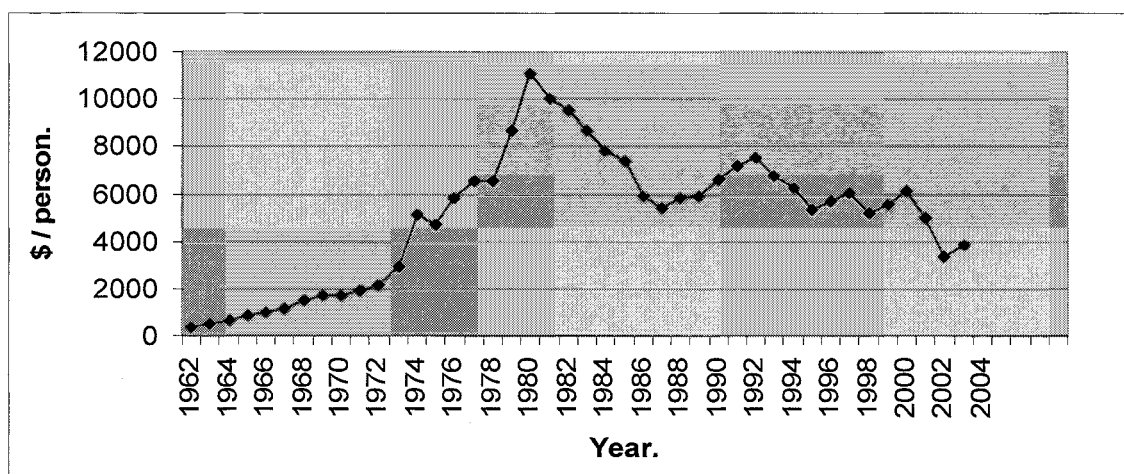


investment in agriculture and non-petroleum-related industry, the percentage of Libya's gross domestic product derived from oil has remained fairly constant since the early 1970s, fluctuating between 50% and 60% until 1982, when declining oil revenues caused it to drop below 50%. Since the time of the Al-Fatah Revolution in September 1969, reducing Libya's dependence on oil has been the government's major economic policy objective. Its inability to achieve this goal stems from ill-advised policy decisions as well as the many obstacles to economic diversification in a land lacking in both basic infrastructure and water resources (Aziz, 1992).

The declining oil prices of the 1980s reversed the previous decade's trend of sustained growth in national income. In real terms, GDP increased gradually every year from 1970 to 2000. Since 1980, however, the contribution of the oil there has been a gradual decline. A turning point for the economy occurred in 1981, as real GDP dropped by a staggering 18%. Preliminary figures for 1984 estimated that, in constant 1980 terms, the GDP was LD 10.277 billion, a level comparable to that of 1975-76. The rate of growth in real GDP has exhibited widespread fluctuations since 1970. Apart from these two dramatic years, real GDP grew at an unspectacular average rate of 1.8% from 1995 to 2000.

Figure 2.5 illustrates the strong relationship between oil revenues and per capita income in Libya through the years 1962-2003. In 1980, the highest per capita income of the period was due to high oil prices at the end of the 1970s. During the period of the study, the per capita income increased nearly 11 times, which exceeding the less than 5-fold increase in the total population.

**Figure 2.5: Per Capital income, in US\$.**



Sources: Central Bank of Libya, Annual Reports 1980 and 2004. Arab Monetary Fund, (1990, 1995 and 2000).

Oil revenue dominates the Libyan economy, accounting for over two-thirds of national income and over 95 per cent of export earnings. Libya has the highest GDP per capita in Africa (Enterprise Ireland, 2004).

Table 2.7 shows that the size of the workforce in different Libyan sectors during 1962-2003. The main aim of development policy after the revolution was to establish a sound production base, aiming to develop and diversify national income sources and the reduction of oil's contribution to GDP. To implement this development policy the government spent huge amounts of money on the agriculture, manufacturing and services sectors. As a consequence, these huge investments increased the demand for both Libyan and foreign labour in different economic sectors. The percentage of the Libyan work force to the total population is 20%. The main reasons for this are the lower contribution of Libyan women to economic activities and 51% of population are aged less than 15 year old.

**Table 2.7: Sectoral Employment, in thousands, (1962- 2003).**

YEAR	Agriculture	Oil	Manufacture	Construction	Services	Total
1962	145.7	14.6	23.8	32.4	139.5	356.0
1965	142.5	14.6	23.7	33.0	158.4	372.2
1970	126.0	14.0	20.4	49.0	224.1	433.5
1975	133.4	17.6	32.9	152.6	340.6	677.1
1980	153.4	22.0	58.0	173.0	407.0	813.0
1985	177.0	21.0	75.0	152.0	470.0	895.0
1990	188.9	25.4	99.4	157.1	547.8	1018.6
1995	189.6	27.3	102.2	140.5	831.7	1,186.2
2000	189.9	30.3	106.6	144.2	974.0	1,445.0
2003	190	35.1	108.5	146.7	1,132.7	1,613.0
Average	163.64	22.19	65.05	118.05	522.58	880.96
St.dev	25.99	7.25	37.66	56.01	348.00	440.60
C.V.	0.16	0.33	0.58	0.47	0.67	0.50

Source: The Authority of National Information & Documentation, 1990 and 2004.

Consequently, the volatility in oil prices in the mid 1980s and 1990s has had a negative affect on GDP. Since nearly 90% of the budget is financed by oil revenues, changes in oil prices has led to a substantial and a rather acute budget deficit during the period 1994-2001 of 4% of GDP. A significant improvement compared to that of the period 1978-1992 when the budget registered deficits in most years of that period, and the deficit averaged out around 12% of GDP per year. In attempt to decrease reliance on oil revenues, in 2001 Libya has begun removing subsidies on various domestic products and public services. Figure (7.1) shows the movements of crude oil price during 1970-2002 (Ghanem, 1985).

## 2.8 Trade Balance

Table 2.8 illustrates that the Libyan economy depends primarily upon revenues from the oil sector, which contributes almost all export earnings. These oil revenues and a small population give Libya one of the highest income per capita in Africa. In this statist society, import restrictions and inefficient resource allocations have led to periodic

shortages of basic goods and foodstuffs. Climatic conditions and poor soils severely limit agricultural output, and Libya imports about 75% of its food requirements. “Higher oil prices in 1999 and 2000 led to an increase in export revenues, which improved macroeconomic balances and helped to stimulate the economy (Henderson, 2002).

**Table 2.8: Libyan trade balances, in US\$ million (1962-2003).**

Year	Total Imports	Total Exports					Trade Balance
		Oil	%	Non-Oil	%	Total	
1962	206	153	98	3	2	156	-50
1965	320	1037	99	7	1	1044	724
1970	555	2829	100	8	0	2837	2282
1975	3542	6034	100	6	0	6040	2498
1980	8779	22567	100	12	0	22579	13800
1985	4101	12132	99	182	1	12314	8213
1990	5336	10715	81	2510	19	13225	7889
1995	5147	7763	91	747	9	8510	3363
2000	4081	12230	96	459	4	12689	8608
2003	6292	13567	95	777	5	14344	8052
Average	3835.90	8902.70	95.87	471.10	4.13	9373.80	5537.90
St.dev	2807.82	6815.81	5.92	780.78	5.92	7011.82	4417.93
C.V.	0.73	0.77	0.06	1.66	1.43	0.75	0.80

Source: Central Bank of Libya, various issues. OPEC, Annual Statistic Bulletin 2003, Table 4.

It could also be argued that Libya has invested much of its oil profits in the development of other parts of its economy, including agriculture, industry, and mining. Agriculture is expanding south from the coast to newly irrigated areas of desert. Most of the large farms, which are owned by the government, have begun to produce foods that were formerly imported, including maize, wheat, and citrus fruits, as well as cattle, sheep, and poultry. Decreased oil revenues in the 1980s, however, set back Libya's economic development, and the country must still import much of its food. Industry is dominated by oil production, but forms of local industry include traditional handicrafts, food

processing, textiles, and construction. The government is working to develop medium and heavy industry to help reduce Libya's dependence on imports.

Table 2.9 shows that Libya's main trading partners are Italy, making up about 40% of the export market and 18% of the imports; Germany with 20% and 12%; and Britain with 6.5% and 3%. The distribution between products is uneven, with only petroleum exports to Europe, and a predominance of imports of technology products into Libya. A further consequence of the international embargo on Libya has been improving trade relations with other countries like China.

**Table 2.9: Libyan Major Trade Partners in Imports, US\$ Millions.**

Year	Italy	Germany	UK	Tunisia	France
1970	52.9	62.2	52.1	1504	67.0
1975	426.0	78.9	196.2		312.0
1980	1797.1	456.0	474.9		456.0
1985	1380.1	1022	338.0		226.0
1990	961.0	774	351.0	122.5	333.0
1995	1054.0	584	376.0	211.8	347.0
2000	1,041	497	311	291	398.2
2003					

Sources: Central Bank of Libya, 1970, 1980 and 2003. Socio-economic Indicators 1969-1999.  
National Authority for Information and Documentation. Arab Monetary Fund. Libya 2003  
Country Review, Country Watch.

The decline in Libya's trade position after 1981 was largely the result of falling oil prices and decreasing volumes of oil exports. The oil price decline resulted from factors beyond Libya's control, but much of the decline in export volume resulted from Libya's decision to stay generally within its OPEC production quotas. These quotas were reduced in the early and mid-1980s as OPEC tried to use its market power to reverse the falling price trend.

## **2.9 Economic Development Plans**

After oil discovery in Libya in 1959, no other economic sector in Libya had adequate production and visible resources that could have been expected to raise standards of living markedly and alter the serious economic and foreign trade imbalances. The first shipment of Libyan crude oil, which was exported in September 1961, marked the start of a new era in the economic history of Libya of capital surplus and rapid economic growth. Oil revenues began to accrue to the Libyan government on a significant scale in 1964. Those revenues increased by 444.4% from 1958 to 1964, and by 1970 Libya had become the world's fourth largest exporter of crude oil (El Fathaly and Palmner, 1980).

Henderson (2002) argues that the impact of oil on Libya's economic growth has been impressive: From 1960 to 1970, the compounded rate of growth of Libya's national income averaged 21.5% while for the same period, it was 4.07 and 3.75 for Morocco and Tunisia, respectively. Per capita income in Libya was \$1,215 in 1968, while for the same year it was \$293 in Algeria, \$185 in Morocco, and \$236 in Tunisia".

Prior to 1963, Libya did not have a national economic development plan. However, during the period between 1952 and 1960, a series of ad hoc agencies were formulated to deal with the problems of economic development of the country. The activities of those agencies were mostly financed by grants from western governments (USA, UK, and France) and the United Nation (El Fathaly and Palmner, 1980).

### **2.9.1 The First Socio-economic Plan (1963-1968)**

In April 1963, the National Planning Council was formed to implement the first Five-Year Plan of 1963-1968. The plan was designed to spend \$473.2 million. However, because oil revenues grew more rapidly than was initially anticipated Actual expenditures under the plan totalled \$1344.8 million. The plan actually allocated only 12.9% of total expenditures to directly productive activities, i.e. industry and agriculture. The relatively small fraction allocated to productive activities reflected the limited capacity of the Libyan economy to utilize capital. The government realized that a massive investment in agriculture and industry would be wasted until an adequate level of economic and social infrastructure could be established (Elmaihib, 1981). The objectives of the Five-Year plan were as follows:

- 1- To ensure the early improvement of the standard of living of the people, particularly those of limited income who did not yet benefit from economic prosperity.
- 2- To give special consideration to the agricultural sector, this being the source of supply of most of the essential consumer goods, besides being the source of income and employment for the majority of the people.
- 3- To permit the public sector to continue its investments in such services as education, health, communications and housing, together with other sectors as required to consolidate the basic elements for rapid economic growth.
- 4- To develop rural areas by establishing productive and public projects.
- 5- To take such monetary, financial and commercial measures, all in a coordinated effort, as may be necessary to ensure increased revenue and to enforce tight control on expenditures.

- 6- To take steps to overcome the lack of information and statistical data which are necessary for planning by strengthening the existing statistical organs and by carrying out studies and research work.

The main results of the plan were apparent in expanded infrastructure, road construction, schools and hospital construction and increased electric power. The performance of agriculture and industry was very poor. Between 1962 and 1967, the average annual growth rate of the agricultural and industrial sectors was only 4.5% and 9.6% respectively. The gross national product of Libya (GDP) more than trebled between 1963 and 1968. Per capita income at current prices increased over twenty times, from \$40 in 1952, to \$881 in 1967 and to \$1125 IN 1968.

### **2.9.2 The Second Five-Year Plan (1969-1973)**

This plan was designed to allocate \$3.2 billion; approximately seven times the planned expenditures and 2.4 times the actual expenditures of the First Five Year Plan. This second Five Years Plan was never implemented. On Monday September 1, 1969, the Revolutionary Command Council replaced the Sanusi Government, and rejected the development plan adopted by the previous regime (Libyan Planning and Information Institute, 1988).

### **2.9.3 The Third Three-Year Development Plan (1973-1975)**

In April 1972, the government published a three year development plan for 1973-1975. The total allocation of the plan was designed to be LD 2585.900 million. However, actual expenditures were larger. For 1972, the government allocated \$1,017.6 million.



This was more than twice the actual expenditures for 1971 and equal to 75% of the actual expenditures for the entire first five years plan. The third plan assigned 22.1% of total allocation to the agricultural sector, 12.8% to industry, 7.2% to the oil sector, 10.2% to electricity, 8.6% to transportation, 9.2% to the education sector, 14.1% to the housing sector, 2.5% to public health, 0.8% to Social affairs and social security, and 0.3% to tourism.

The main achievements of the Three Year-Plan 1973-1975 were made in the sectors of agriculture, manufacturing and construction. The gross domestic product (GDP) increased from LD 2182.7 million in 1973 to LD 3674.3 million in 1975, an annual average rate of 31.7%; while the agricultural sector grew in value from LD 60.0 million in 1973 to LD 82.9 million in 1975, an annual average of 24.5%. The manufacturing sector also increased in value from LD 43.8 million in 1973 to LD 65.5 million in 1975, an annual average rate of 27.2%. The construction sector grew by 34.2% for the period 1973-1975. Non-oil activities rose in value from LD 1038.9 million in 1973 to LD 1692.5 million in 1975, an annual average rate of 27.3% for the period. The oil and gas sector it self grew in value from LD 1143.8 million in 1973 to LD 1981.8 million in 1975, with an annual average rate of 38.6% over the period. During 1973-1975 the per capita income increased from LD 929 in 1973 to LD 1369 in 1975.

#### **2.9.4 The Fourth Five-Year Socio-economic Development Plan (1976-1980)**

In January 1976, The Revolutionary Command Council released the fourth Five-Year Economic and Social Development Plan for the period 1976-1980. The total planned expenditures amounted to LD 7.6 billion. The plan involved more than eighty-five

major projects. Two major proposed projects were an aluminium-producing complex at Zuara, with an annual capacity of 110,000 tons, and an iron and steel complex at the town of Misurata, initially capable of an annual production of one million tons upon completion in 1981 (Haddad, 1990).

The agricultural sector was given the first priority in terms of planning allocations, with the emphasis given to agrarian reform and regional agrarian development) “The sector was elected to receive a total of \$4,088.6 million or 18% of the plan’s total planned expenditure. Industry came second with an allocation of \$3,475.2 million or about 15%. Housing and utilities, oil and gas transportation and communications, municipalities, electricity and education were allocated \$2,640.9 million, \$2,160.6 million, \$2,110.5 million, \$1,842.2 million, \$1,742.2 million, and \$1,568.1 million respectively (Khader and El-Wifati, 1987).

The main objectives of this plan were as follows:

- 1- To raise the total production in all sectors.
1. To increase the private consumption at a planned annual compound rate of 9.4%, while the public consumption was planned to grow at an annual compound rate of 9.6%.
- 2- The average per capita income was planned to increase from LD 1678.0 in 1976 to LD 1939.7 in 1980.

### **2.9.5 The Fifth Five-Year Socio-economic Development Plan (1981-1985)**

The main objectives of this plan were as follows (Ministry of Planning: 1988:2-10):

- 1- To meet the overall target of growth for non-oil activities at an annual compound rate of 10.3 %.
- 2- To continue investment in the infrastructure.
- 3- To place more emphasis on industrialisation following an extension of advanced production techniques in other fields of economic activity.
- 4- To decrease the dependence on foreign countries in meeting basic requirements by increasing the rate of agricultural growth and achieving a sufficient supply of foodstuffs for the population of Libya.
- 5- To create a more equitable income distribution by providing employment, extending social and welfare services and expanding local development programmes, especially in rural areas.
- 6- To diversify exports of foods, expanding existing foreign markets and penetrating new markets.
- 7- To improving administrative services by introducing basic changes to the administrative system and extending advanced managerial techniques to all ministries, and to public and private organisations.

The increase in investment allocation amounted to LD 2170 million during the period 1973-1975, LD 7840 million for the period 1976-1980 and LD 16894 million for the period 1981-1985. However, the introduction of new industries such as iron, engineering and electrical industries, and extraction industries, as well as expansion of

the already existing industries, meant that the publicly owned industrial sector was vastly expanded, occupying a leading role in the country's industrial activity.

#### **2.9.6 Proposed Socio-economic Transformation Plan (1986-1990)**

The sixth five year-year plan, which started in 1986, aimed to promote agricultural self-sufficiency, the development of heavy industry and refining capacity, and the provision of housing and other social facilities. The total allocation of this plan was LD 10.9 billion. According to the Ministry of Planning (1990:4-17), the main objective of the plan was to give special consideration to agricultural and industrial sectors, increasing the participation of the productive rather than the service sectors:

- 1- To increase the exploitation of production factors.
- 2- To decrease general expenditure and increase financial resources in order to minimize the deficits in the administrative budget.
- 3- To raise the contribution of Libyan manpower in economic activities.

This proposed plan was not approved and a decision was taken to postpone it. The main reasons behind this delay are:

- 1- Crude oil prices dropped sharply, especially at the beginning of the first year of this plan.
- 2- The current liabilities of existing developmental projects were too enormous, surpassing LD 4.5 billion in 1996.
- 3- Unclear and unstable of Libyan policies.

### **2.9.7 Proposed Socio-economic transformation Plan (1991-1995)**

The total allocation of this plan was LD 12.8 billion, although LD 9.7 billion of this was financed from the development budget, and LD 3.1 billion from other sources. This plan aimed at greater self-reliance and better use of existing capacity in all economic sectors (Rivlin, 2001:51).

### **2.9.8 The Tripartite Programme (1994-1996).**

This programme is not obviously a development plan. Its main aims were as follows:

- 1- To organize a new development plan.
- 2- To eliminate the existing liabilities of development enterprises.
- 3- To complete either the present enterprises or the suspended projects.

### **2.9.9 Proposed Socio-economic Transformation Plan (2002-2006)**

This proposed transformation plan was first designed in 1999. The main features of this plan are that:

- 1- To encourage the local investment to take part in development process.
- 2- To attempt to find new sources of funding to the economy, instead of oil resources.
- 3- To open the door to the domestic sector and encourage it to participate in economic development activities in terms of financing and implementation.

The main differences between this plan and previous plans are as follows:

1. It was dominated by the need to diversify and build a strong economy.
2. It highlighted the importance of the domestic sector's role to finance and implement projects.
3. It placed emphasis on the crucial role of the economic environment.
4. It requested the government not to intervene in public and services projects and encouraged the domestic sector to do so. However, the government has still responsible for establishing public and infrastructures sectors.
5. It highlighted the importance of coordination between trade, monetary and financial policies.

According to Metz (2003), the main features of this proposed plan for the oil sector were:

1. To implement the discovery programme rising Libyan crude oil production to 5000 million barrels at the end of the plan period.
2. Crude oil production would increase by 2925 million barrels of crude oil, and total annual Libyan revenue would increase by \$58499 million.
3. The production of natural gas would increase by 106 billion standard cu m, and total Libya revenue would increase by \$24745 million.
4. To develop and increase refining products, as shown in table 2.10.

**Table 2.10: Production of refined products before and after the plan.**

Location	Products	Natural gas	Diesel	Petrol	Kerosene	Gasoline	Heavy oil	Total
<b>Ras-Lanuf</b>	Before	141	1809	100	600	2202	4121	8773
	After	227	-	2765	455	4416	910	8773
<b>Zawia</b>	Before	80	600	700	1130	1300	1450	5210
	After	233	0	2466	710	1605	196	5210
<b>Tobruk</b>	Before	9	161	-	49	207	547	973
	After	20	-	150	49	207	547	973
<b>Sabha</b>	Current	22	-	184	86	268	275	835
<b>Total</b>	Before	180	2570	700	1679	3709	6118	14956
	After	502	0	5565	1300	6496	1928	15791
<b>Change</b>		322	2570	4865	879	2787	4190	835

Source: The Development Socio-Economic Plan 2002-2006.

Libya continues to explore downstream options with the prospect of substantial increases in oil production in the near future. Libya also continues to explore options for increasing its downstream refining capacity. The NOC has launched a \$3.5bn refinery expansion and upgrading programme. This includes an upgrade of the 120,000 b/d Zawia refinery, for which the main contract was awarded in May (NOC, July 2002: 25), expansion of a 24,000 b/d refinery at Tobruk, and upgrades at the 220,000 b/d refinery complex at Ras Lanuf and the 10,000 b/d Brega refinery, and by LG Construction of South Korea to upgrade a new 20,000 b/d refinery at Sebha which will supply domestic demand. LG is due to begin work on the Sebha plant in July and expects to finish in early 2005 (NOC,2000:18).

Libya has implemented the biggest water project in the world at a cost of \$45 billion (The Great Man Made River) which should irrigate millions of hectares of land to turn it into arable lands for producing food and creating job opportunities for Libyan citizens.

This project will also improve the income of Libyan citizens and the government will use it as another source of national income.

## **2.10 Conclusion**

Libya is a North African Arab country lying to the south of the Mediterranean Sea with a coast line of about 2000 km and a total area of about 1,750,000 square kilometres, with a total population of about 5.9 millions in 2003. Libya has a very important geographical position, linking Sub-Saharan African with Europe, and eastern and western Arab and African countries.

After almost three thousand years of foreign control and occupation by Greeks, Phoenicians, Carthaginians, Romans, Vandals, Byzantines, Sicilians, Spanish, Knights of Malta, Turkish, Italians, English and French, the country was very ill equipped to solve its many problems of economic growth and sustained development. When Libya became independent in late 1951, it was one of the most backward and poorest countries in the world. After the discovery of oil by FOCs at the end of the 1950s, and the exporting of the first shipment of Libyan crude oil in September 1961, there was no economic sector in Libya with adequate production and visible resources that could have been expected to raise standards of living and foreign trade imbalances.

In 1962, this situation had changed dramatically and since then profound structural changes have taken place in the economic, political, and social fields. The Al-Fatah Revolution of September 1, 1969 marked the beginning of a period of the government's



intervention in the economy, which was largely financed by the booming oil revenues of the 1970s. Lower oil prices in the early 1980s dramatically reduced government revenue and caused a serious decline in economic activities. The benefits of the oil industry to the Libyan economy have been mainly through providing oil revenues for financing the country's development plans and providing foreign exchange.

The rapid accumulation of oil revenues enabled the country to achieve a higher rate growth in terms of GDP and per capita income during the last thirty-five years. Almost all of the funding sources for the non-oil sector come from oil revenues. Since the 1969 Al-Fatah Revolution, reducing Libya's dependence on oil has been the government's major economic policy objective. In 1982, the USA imposed economic sanctions which were followed by UN economic and trade sanctions in 1992. These sanctions seriously affected the economy and prevented international oil companies from investing in the Libyan oil sector.

## **CHAPTER THREE**

### **THE LIBYAN OIL AND GAS SECTOR.**

#### **3.1 Introduction**

The discovery of oil in Libya in the late 1950s by foreign oil companies (FOCs) was to turn the economic fortunes of the country around from one of the world's poorest to one of the richest in terms of per capita GDP. The oil sector is the main source of national income and foreign exchange in Libya. The 1969 Al-Fatah Revolution established many regulations and laws to control and regulate the oil sector so as to guard against its misuse or waste by the FOCs working in Libya.

The objectives of this chapter are to summarize the main features of the Libyan oil sector, and also to analyse trends in the development of the oil sector since oil was discovered in 1959. In addition, the chapter emphasises the contribution and role of the oil sector in the Libyan economy. Finally, the chapter highlights the role and participation of FOCs in the Libyan oil sector activities.

This chapter deals with the oil and gas sector in general with emphases on the role of FOCs and their investment activities. First, it review the historical background to oil discovery in Libya, and discusses the proven oil reserves and oil production. This is followed by a review of the contribution of the oil sector to Libyan exports, and a consideration of the geographical distribution of Libyan oil exports. The subsequent

section reviews Libyan natural gas and the refining sub-sector, and the final section explains the effects of oil sanctions.

### 3.2 Oil as a Source of World Power

Table 3.1 illustrates that crude oil is by far the most important source of energy worldwide. OPEC's eleven members collectively supply about 40% of the world's crude oil output and process more than three-quarters of the world's total proven crude oil reserves. OPEC believes that oil demand will continue to grow strongly and oil will remain the world's single most important source of energy for the foreseeable future (OPEC, 2005).

**Table 3.1: World Energy Fuel Shares, in Percentages.**

Year	Crude Oil	Gas	Solids	Hydro/Nuclear	% Total
1998	41.3	22.2	26.2	10.3	100
2000	41.3	22.4	26.1	10.2	100
2010	40.3	24.1	26.3	9.3	100
2020	39.2	26.6	25.8	8.4	100

Source: OWEM Scenarios Report, March 2000.

### 3.3 History of Libyan Oil and Gas Exploration and Production

The discovery of oil in 1959 changed Libya from a very poor and backward country which relied completely on the agriculture sector to a country dependent on oil and oil products. There have been several stages of oil discovery in Libya (Economist Intelligence Unit, 2002).

### 3.3.1 Oil Exploration and Discovering During 1952-1969

The first exploration and discovering activities started regarding the first miner law was issued in 1953. As consequence, the number of FOCs increases to nine companies including American oil company, British Petroleum Company, Nelson Bencrhint Company, Oasis oil Libya, American Oil Overseas Company, Total France, Shell Company, Esso Standard Oil, and Mobile Canada Company. As pointed out by the Economist Intelligence Unit (1990:), the oil companies continued working under miners law until law number 25 was issued in April 1955, which divided the country into four oil districts as follows:

- 1- District one included almost all of the north west of the country (Tripoli, Zawia, Musrata and Sirte).
- 2- District two included almost all of the north east of the country (Benghazi, Derna, and Jabal-Alakhder area).
- 3- District three included the south east of the country (Alkhfra, Tazerbo, Oghla, Galo, Alsrir, and Alwahat).
- 4- District four included the southern area of the country (Sebha, Obari, and Morziqu).

As Table 3.2 demonstrates, in 1958 the number of discovery teams increased to about 80. The first oil company to discover oil in Libya was the Esso oil company of the El-Atshan oil well in January 1958, but the quantity was very low. This led the company to move to the Sirte district, and later the company discovered oil in the Zelten oil well, for the first time in commercial quantities, in 1959 (Jahangir, 1982).

**Table 3.2: Summary of the first oil discovery activities during 1958-1959.**

<b>Company</b>	<b>Field Name</b>	<b>Completion Date</b>	<b>Production (b/d)</b>	<b>Gravity</b>	<b>Depth /m</b>
<b>Esso Standard</b>	El-Atshan	20.Jan.1958	508	44.5	2200
<b>Oasis</b>	El-Bahi	27.Jan.1958	500	39.0	5840
<b>C.P.T.L.</b>	Oued Tahara	26.Dec.1958	100	45.0	4580
<b>Oasis</b>	Dahra	30.Apr.1959	1061	41.0	3200
<b>Esso Standard</b>	Zelten	13.Jan.1959	17500	37.0	5500
<b>Esso Sirte</b>	Mabruk	30.Jul.1959	500	40.0	5700
<b>Gulf</b>	Emgaget	7.Sep.1959	888	37.9	4100
<b>Amoseas</b>	Beida	26.Sep.1959	3650	36.6	4000
<b>Shell</b>	Bir Tlacsin	30.Oct.1959	700	44.0	8900
<b>Mobil</b>	Amal	1.Nov.1959	990	34.0	9900
<b>Oasis</b>	Dahra B.	14.Nov.1959	36	43.5	2800
<b>Oasis</b>	Waha	27.Dec.1959	226	21.6	1500

Source: Farley 1971: 123.

Table 3.3 shows that in 1958 there was only one drilled oil well. In 1961 increased to 402 oil wells, included 173 productive wells. In 1968, the total number of oil wells increased to 2218 wells which included 1164 productive wells.

**Table 3.3: The number of oil wells drilled in Libya during 1958-1968.**

<b>Year</b>	<b>Productive Wells/ No.</b>	<b>Dry Wells/ No.</b>	<b>Total</b>
<b>1958</b>	0	1	1
<b>1959</b>	6	3	9
<b>1960</b>	41	27	68
<b>1961</b>	173	229	402
<b>1962</b>	271	354	625
<b>1963</b>	440	546	986
<b>1964</b>	657	743	1400
<b>1965</b>	823	878	1701
<b>1966</b>	1006	933	1939
<b>1967</b>	1086	983	2069
<b>1968</b>	1164	1054	2218

Sources: Oil Ministry. Libyan Oil 1954-1961 Tripoli 1962, page 49. Republic of Libya, Ministry of Planning, Statistical Institution, Tripoli, July 1970, page No. 135.

### **3.3.2 Discovery Activities from 1969 Until 1987**

Since the Al-Fatah Revolution of September 1969, increasing oil exploration and discovering activities was one of the important aims. One of the main acts of the Al-Fatah Revolution in the oil sector was to issue law 115 in late 1971. this law nationalized of the British Petroleum Company (BP) and established instead a new national oil company called “Arabian Gulf Oil Company”, which was fully owned by the National Oil Corporation. In 1973, another oil law was issued. Law number 42 nationalized the Nelson Bencrhant Oil Company (Attiga, 1973).

The Revolutionary Laws began by issuing nationalization law partially or wholly in relation to monopoly FOCs which were working in explorations, production and distribution of oil and its products. These laws are the tools in dominating dominated Libyan people on their own oil wealth (The Economist Intelligence Unit, 1994-1995):

- 1- Law No. 69 of 1970, restricts NOC as being the only institute to control the activities of imports, exports, distribution of the Libyan oil, and nationalizing the following companies, a) Al-Sale Joint-Stock Oil Company- Libyan Company. B) Shell Libya Limited Oil Company. C) Esso Standarad Libya Joint-Stock Oil Company, (Marketing Department). D) Esso Srandard The Far East (Libyan Branch).
- 2- Law No. 115 of 1971 relates to the nationalized British Petroleum and established new Libyan company called Arabian Gulf Oil Company.

- 3- Law No. 42 of 1973 nationalization of Nelson Bencrhant Oil Company.
- 4- Law No. 44 of 1973 nationalization 51% from Occidental Libya Joint-Stock Oil Company.
- 5- Law No.44 of 1973 nationalized 51% of the following companies: Esso Standrad Libya Joint-Stock Oil Company and Esso Sirte Joint-Stock Oil Company, and renamed as Sirte Oil Company.
- 6- Law No. 10 of 1974 nationalized the American oil companies.
- 7- Law No. 35 of 1974 nationalized Shell Oil Company for exploration.

### **3.3.3 The National Oil Corporation and Oil Discovery**

The publicly-owned Libyan corporation for oil was established by law number 25 of 1955. After the Al-Fatah Revolution the Revolutionary Command Council issued new law number 24 in March 1970. This law involved the establishment of the National Oil Corporation to take over all search, discovery, production, and export activities of inshore and offshore oil throughout the country.

**Table 3.4: Number of Oil Wells Drilled by FOCs, 1961-1988.**

<b>Company</b>	<b>Number of old Exploratory wells 1961-69</b>	<b>Number of productive wells in 1988</b>	<b>Total number of exploratory wells</b>	<b>Number of new Exploratory wells 1970-87</b>
<b>Al-waha</b>	152	31	183	100
<b>Al-gulf</b>	217	41	258	122
<b>Al-zuitina</b>	47	15	62	55
<b>Ektan</b>	19	9	28	25
<b>Mobiel</b>	80	34	114	52
<b>Agip</b>	61	21	82	46
<b>Sirt</b>	60	5	65	33
<b>Wentershall</b>	13	1	14	7
<b>Total</b>	3	N-A	3	1
<b>Brasbetrow</b>	12	1	13	12
<b>Geomin</b>	48	20	68	42
<b>Dminiks</b>	6	1	7	6
<b>Kwital</b>	2	N-A	2	2
<b>Rompetrol</b>	23	6	29	12
<b>Shell</b>	3	N-A	3	3
<b>Total</b>	746	185	931	518

Sources: Ministry of Oil. The oil sector movement, annual report, Tripoli, 1988, page No. 33.

As Table 3.4 illustrates, The National Oil Corporation (NOC) achieved many important oil discoveries in its inshore activities. 258 exploratory oil wells were drilled by the Arabian Gulf Oil Company, which included 41 productive oil wells. The Waha oil company drilled about 183 exploratory oil wells, and the Agip oil company was also heavily involved in oil discovery. The Bulgarian Geomin oil company drilled 68 wells, just 20 of which were productive. This company commenced investment in Libya in 1980 as a joint venture with NOC. Other FOCs, such as Total, Kwital, and Shell did not find oil in Libya at that time. The total number of oil wells drilled from 1970 until the end of 1987 were 930 wells, including 518 new exploratory wells and 185 productive wells representing a 55.6% success rate.



Table 3.5 shows that, according to an industry survey conducted by Robertson Research International, UK (2000), Libya is the most attractive country in the world in terms of oil and gas exploration.

**Table 3.5: Countries with the Most Potential for Oil Exploration in 2000.**

RANK	COUNTRIES
1	LIBYA
2	IRAN
3	UK
4	AUSTRALIA
5	ALGERIA
6	IRAQ
7	INDONESIA
8	ANGOLA
9	BRAZIL
10	EGYPT

Source: Robertson Research International, UK, 2000.

### 3.4 Oil Production

Libyan production started in 1960 at the Al-atshan well on the border with Algeria, with a production capacity of 500 barrels per day. Because of the long distances between the well and the coast, the company decided to go and search in the Sirt basin. Later on the company discovered oil in the Zelton district, which is about 170 km from the Libyan coast, the production capacity is about 17,500 barrels per day (b/d). In September 1961, the first shipment of oil from Libya at the first time in the Libyan history was exported from the port of Al-briga.

Table 3.6 shows that Libyan oil production started in the last four months of 1961. In 1962, the first complete production year, output by FOCs gradually increased to about 184,000 barrels per day. In the same year the world total crude oil production was 24.35 million barrels per day, the Libyan oil contribution in the total world production was/ therefore less than 1.0 %.

**Table 3.6: Crude oil production by operating companies per 1000 b/d (1961-1971).**

Company	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Esso Standard	18.2	126.2	250.0	408.9	471.7	488.1	495.9	615.4	618.3	570.6	349.1
Esso Sirte	-	-	43.6	73.1	95.4	95.8	107.2	128.0	127.9	121.4	98.2
Oasis	-	57.7	167.2	324.0	505.8	560.5	630.0	687.9	789.0	946.1	824.4
Mobil	-	-	2.8	45.6	100.7	170.5	204.2	237.7	264.2	252.9	186.5
Amoseas	-	-	-	13.1	43.7	81.9	128.9	244.5	369.1	322.9	261.5
Injaz	-	-	-	-	-	4.0	168.5	304.9	321.3	412.9	419.6
NOC (Phillips)	-	-	-	-	2.9	8.2	4.9	7.5	6.0	4.2	3.7
Amoco	-	-	-	-	-	8.3	4.4	1.1	0.4	7.7	14.6
Occidental	-	-	-	-	-	-	-	382.1	607.8	659.4	586.4
Aquitaine	-	-	-	-	-	-	-	-	5.1	19.9	16.8
Total	18.2	183.9	463.6	824.7	1220.2	1417.3	1744	2609	3109	3318	2760

Sources: NOC, 1989, Tripoli. Al-Boury magazine issue no. 58, March 1987, Tripoli, page No.27.

The discovered of oil in Libya changed the country from a backward and unknown country to a rich and very reknowned country. Since the Al-Fatah Revolution in September 1969, Libya for the first time in its history had exclusive control over its natural resources. However, the increased role of the government and nationalization of some FOCs lead to a decrease in oil production from 3.318 m b/d in 1970 to 2.760 m b/d in 1971.

Table 3.7 shows that Libyan oil production in 1962 was 184,000 barrels, representing 0.8% of world production. In 1970, Libyan oil production was 3.318 m b/d, this represented 7.2% of total world production.

**Table 3.7: Libya and world crude oil production in mb, (1962–2003).**

<b>Year</b>	<b>Libyan crude oil production million b/d</b>	<b>World crude oil production million b/d</b>	<b>% of Libya / World million b/d</b>
<b>1962</b>	0.184	24.35	0.8
<b>1965</b>	1.220	30.33	4.0
<b>1970</b>	3.318	45.89	7.2
<b>1975</b>	1.479	52.83	2.8
<b>1980</b>	1.831	59.60	3.1
<b>1985</b>	0.997	53.98	1.9
<b>1990</b>	1.389	60.57	2.3
<b>1995</b>	1.399	62.33	2.3
<b>2000</b>	1.347	68.34	2.0
<b>2003</b>	1.431	67.09	2.13
<b>Average</b>	1.46	52.53	0.03
<b>St.dev</b>	0.78	14.93	0.02
<b>C.V.</b>	0.54	0.28	0.61

Sources: OPEC, Annual Statistical Bulletin 1981, 1992 & 2003.

Table 3.8 demonstrates that among the Arab countries, Saudi Arabia has been the biggest oil producer during the study period, also its contribution about 58.8% of total Arabic oil production followed by the United Arab Emirates (UAE) 9.0%. Libya was the third largest oil producer, about 7.3% of total Arabic oil production. The production contribution of The Organization of the Petroleum Exporting Countries (OPEC) to total world production decreased during the 1980s, and increased again during the 1990s (Abdel-fadil, 1987).

**Table 3.8: Crude Oil Productions in Some Arabic Countries m/b/d (1962-2003).**

<b>Year</b>	<b>Libya</b>	<b>UAE</b>	<b>Saudi Arabia</b>	<b>Kuwait</b>	<b>Iraq</b>	<b>Total OPEC</b>	<b>Total World</b>
<b>1962</b>	0.184	0.01	1.64	1.96	1.01	10.51	24.35
<b>1965</b>	1.220	0.28	2.21	2.36	1.32	14.35	30.33
<b>1970</b>	3.318	0.78	3.80	2.99	1.55	23.30	45.89
<b>1975</b>	1.479	1.66	7.08	2.08	2.26	26.77	52.83
<b>1980</b>	1.831	1.71	9.90	1.66	2.51	26.61	59.60
<b>1985</b>	0.997	1.19	3.39	1.02	1.43	16.18	53.98
<b>1990</b>	1.389	2.12	6.41	1.18	2.04	23.20	60.57
<b>1995</b>	1.399	2.23	8.23	2.06	0.56	26.00	62.33
<b>2000</b>	1.347	2.37	8.40	2.08	2.57	29.26	68.34
<b>2003</b>	1.431	2.248	8.410	2.107	1.378	26.89	67.09
<b>Average</b>	0.184	0.01	1.64	1.96	1.01	10.51	24.35
<b>St.dev</b>	1.220	0.28	2.21	2.36	1.32	14.35	30.33
<b>C.V.</b>	3.318	0.78	3.80	2.99	1.55	23.30	45.89

Sources: OPEC. Energy Information Administration / Annual Energy Review 2002.

During the first half of 2003, Libyan oil production was estimated at nearly 1.5 million barrels per day, an increase from 2002 levels but still only about two-fifths of the 3.3 million bbl/d produced in 1970. Libya aims to boost oil output capacity by 175,000 bbl/d in 2004 with the help of European companies. The suspension of UN sanctions, along with possible changes to Libya's 1955 hydrocarbons legislation, could be helpful in this regard. Sanctions had caused delays in a number of field development and new projects, and had deterred foreign capital investment to an extent. The suspension of sanctions means that Libya now can resume purchases of oil industry equipment.

Table 3.9 illustrates that Libyan oil production consists of production by a number of national and foreign companies. The Arabian Gulf oil company was the biggest oil producer.

**Table 3.9: Production of Crude Oil by Operating Company in mb.**

Operating Company	1996	1997	1998	1999	2000	2001	2002	2003
<b>Agip*</b>	83.5	78.5	70.3	62.7	64.6	65.4	62.8	65.2
<b>Arabian Gulf</b>	177.3	151.1	163.7	149.6	144.3	136.8	134.0	158.1
<b>Sirte</b>	44.3	43.8	42.7	41.2	40.5	42.1	38.3	40.5
<b>Veba*</b>	38.5	35.0	34.6	32.6	32.7	32.6	31.0	36.5
<b>Waha</b>	143.4	138.7	132.0	113.6	108.2	107.2	79.4	114.8
<b>Zuweitina</b>	27.0	25.6	25.5	24.5	25.4	26.0	23.1	22.0
<b>Wintershall*</b>	32.2	32.9	42.3	39.4	39.0	39.9	38.3	41.1
<b>Total*</b>	3.5	3.7	5.1	6.4	6.4	6.5	6.7	7.8
<b>O.M.V*</b>	1.2	-	1.0	0.8	0.6	0.6	0.5	0.4
<b>Repsol*</b>	-	-	32.6	56.5	58.1	59.7	59.4	73.6
<b>Total</b>	549.9	509.2	550.9	527.7	519.8	516.8	473.5	560.0

\* = Foreign Company.

Source: NOC, Third Quarter 2004.

### 3.5 Proven Crude Oil Reserves.

Libya's oil reserves are located mainly onshore in three main areas: the western fairway (Samah, Beida, Raguba, Dahra-Hofra and Bahi oilfields), the north-centre of the country (the giant Defa-Wafa and Nasser oilfields, and the large Hateiba gas field) and an eastern area (Sarir, Messla, Gialo, Bu Attifel, Intisar, Nafoora-Augila, Amal fields). Only 25% of Libya's land area is covered by agreements with oil companies. Most oilfields in Libya have lives of about 33 years and, with the exception of Murzuq, most were discovered between 1956 and 1972. The NOC's fields are undergoing natural depletion at a rate of 7%-8% per year (OPEC, 1990).

Table 3.10 shows the development of Libyan oil reserves from 1962 until 2003, from 4.5 billion barrels in 1962 to 46 billion barrels in 2003 a ten fold increased. In 2003, proven Libyan oil reserves were about 5% of OPEC reserves and 4% of the world's total reserves.

**Table 3.10: Proven crude oil reserves per billion barrels during 1962-2003.**

Year	Libya	Total OPEC	% of Libya /OPEC	Total World	% of Libya /World
1962	4.50	232.050	1.94	313.544	1.4
1965	10.00	260.245	3.8	353.058	2.8
1970	29.20	412.431	7.1	611.397	4.8
1975	26.10	449.870	5.8	659.09	3.96
1980	23.0	434.61	5.29	648.524	3.55
1985	21.30	535.80	4.00	767.06	2.78
1990	36.00	765.88	4.70	997.66	3.61
1995	45.00	785.07	5.73	1025.55	4.39
2000	45.00	846.00	5.32	1077.50	4.18
2003	46.00	891.12	5.05	1137.55	4.00

Sources: OPEC, Annual Statistic Bulletin 1980 & 1990 & 2001 & 2003. OAPEC, Annual Statistical Report 2001.

The National Oil Corporation (NOC), its affiliated companies, and joint venture companies have implemented major exploration operations over all of the country, including onshore and offshore activities. As a consequence, many oil wells have been developed, such as the Al-Bourey offshore well which is the most important recent exploration in Libya and also one of the biggest offshore oil wells in the Mediterranean Sea.

### 3.6 Oil Export

With the increase in population the main aim of the Al-Fatah Revolution has been to develop all aspects of Libyan life, therefore many projects involving huge oil consumption have been established in manufacturing, transportation, communications and infrastructure (see Table 3.11). This industrial revolution is reflected in the

percentage decrease of oil exports especially in 2000. Libyan oil exports were the fifth largest among Arab countries in 2000 after Saudi Arabia, Qatar, Kuwait, and Iraq.

**Table 3.11: Total crude oil production & export in million barrels (1962-2003).**

Year	Total Crude Oil Production	Total Crude Oil Exports	% of Export /Production
1962	65.5	65.5	100
1965	445.3	442.4	99
1970	1208.8	1206.8	99
1975	540.1	522.3	97
1980	669.8	644.4	96
1985	365.4	325.2	89
1990	494.7	461.5	93
1995	510.6	403.2	79
2000	519.8	379.2	73
2003	522.6	411.2	79

Sources: OPEC, Annual Statistic Bulletin 1999, 2000 and 2003.

As Table 3.12 shows, the Libyan economy consists of two main sectors, oil and non-oil exports. The first quantity of Libyan crude oil to be exported was by shipment across the Mediterranean Sea in September 1961. The Libyan economy then started to grow, changing from a negative to a positive balance of payments surplus. The oil wealth caused increases in GDP from of 54% in 1964 and 66% in 1970. The main feature of the 1960s was the domination of the economy by the oil sector. This situation created unbalanced developments in the rest of the economy, such as in the agricultural, and industrial sectors. The rapid development of the oil sector attracted many people who were working in agriculture, handicrafts and small industrial sectors to work in the oil sector instead. The movement of so many agricultural workers to the oil sector decreased the importance of the agricultural sector, and during the period from 1962 until 1969 the total agricultural workforce decreased by 20,000. Moreover most

agricultural areas become poorer, and many were transformed by the building of houses and roads.

**Table 3.12: Value of oil exports and non-oil exports, \$m, (1962-2003).**

Year	Oil-Exports	Non-oil Exports	Total Export	% of Oil Export /Total Export
1962	39.2	106.7	145.9	26.8
1965	351.4	130.3	481.7	72.9
1970	1355.2	262.6	1617.8	83.7
1975	4472.2	1556.2	6028.4	74.2
1980	21906.0	712.38	22618.38	97.0
1985	12132.00	182.00	12314.00	98.5
1990	12490.00	746.00	13236.00	95.0
1995	8100.96	1011.31	9112.27	89.0
2000	11260.20	989.8	12250.00	92.0
2003	13567	777	14344	95.0
Average	8567.42	647.43	9214.85	82.41
St.dev	7051.36	475.01	7206.03	21.54
C.V.	0.82	0.73	0.78	0.26

Sources: OPEC, Annual Statistic Bulletin 2001. Libyan Central Bank, various annual reports. OAPEC, Annual Statistical Report 2001 & 2003.

Table 3.13 illustrates that the Libyan total revenues divided by oil and non oil revenues. The Libya's oil industry is the key to its economy. In 1962, Libya earned \$131 million from oil revenue, It was increased sharply to \$14344 million in 2003, which represented a 109 fold increase. But the country remains highly vulnerable to fluctuations in oil prices. Oil represents more than 95% of total export revenue and 98% of hard currency earnings. Libya produces high quality, low surplus crude oil that is highly valued. Its proven reserves are 45 billion barrels and production is 1.4 million bpd. This represents less than half its peak production output of 3.3 million bpd in 1970, a decrease due



mainly to the direct and indirect effects of sanctions. Libya would like to increase production and wants to attract foreign investment to the oil and gas industry to do so.

**Table 3.13: Exported crude oil and revenues, in million US\$ (1962-2003).**

<b>Year</b>	<b>Crude Oil Exports m/b</b>	<b>Oil Prices US\$/b</b>	<b>Revenues of Oil Exported /US\$</b>	<b>% of Oil Revenues /Total Libyan revenues</b>
<b>1962</b>	65.5	2.00	131.00	100
<b>1965</b>	442.4	1.78	787.47	99
<b>1970</b>	1206.8	2.09	2522.21	99
<b>1975</b>	522.3	12.45	6502.64	97
<b>1980</b>	644.4	32.96	21239.42	96
<b>1985</b>	325.2	31.27	10169.00	89
<b>1990</b>	461.5	24.70	11399.05	93
<b>1995</b>	409.0	17.21	7038.89	79
<b>2000</b>	379.2	28.65	10864.08	73
<b>2003</b>	411.2	34.88	14344.00	79
<b>Average</b>	486.75	18.80	8499.78	90.40
<b>St.dev</b>	293.27	13.50	6537.12	9.92
<b>C.V.</b>	0.60	0.72	0.77	0.11

Sources: OPEC, Annual Statistic Bulletin 1992, 2000 & 2003..

In 1981, when oil prices started to fall and the worldwide oil market entered a period of glut, the present phase of Libya's independent economic history began. The decline in oil prices has had a tremendous effect on the Libyan economy. By 1985 Libyan oil revenues had fallen to their lowest level since the first Organization of Petroleum Exporting Countries (OPEC) price shock in 1973. This fall in oil revenues, which constituted over 57% of the total GDP in 1980 and from which, in some years, the government had derived over 80% of its revenue, caused a sharp contraction in the Libyan economy (Don, 1992).

Table 3.14 shows that the NOC represented 70% of total Libyan crude oil exports in 2002, and about 30% were from FOCs. In 2003, 73% of Libyan oil exports were recorded by the NOC, and about 27% by FOCs.

**Table 3.14: Libyan oil exports by operating companies, in million barrels.**

<b>Operating Company</b>	<b>2002</b>	<b>2003</b>
<b>NOC</b>	241.3	321.4
<b>Wintershall</b>	38	41.4
<b>Agip</b>	27.3	28.1
<b>Veba</b>	16.1	16.2
<b>O.M.V</b>	7.4	7.7
<b>Total</b>	6.9	8.5
<b>Repsol</b>	5.9	7.3
<b>Saga</b>	0.6	1.2
<b>Hescky</b>	0.1	0.1
<b>PetroCanada</b>	0	0.4
<b>Total</b>	<b>343.6</b>	<b>432.3</b>

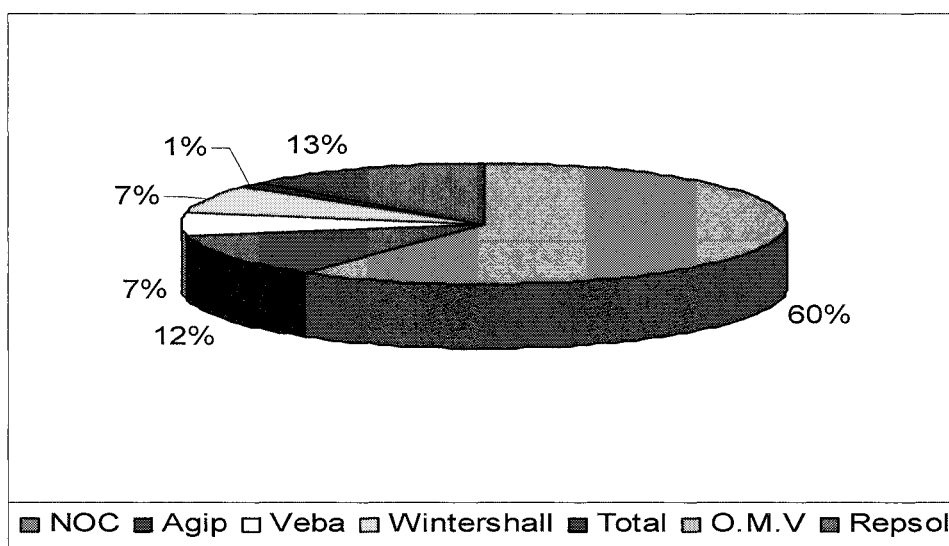
Source: NOC, Third Quarter 2004.

Other FOCs are active in Liby. Lundin Oil is a Swedish independent, and along with its affiliate Red Sea Oil of Canada has discovered an estimated 84 million barrels of oil at the En Naga North and West fields on block NC-177 in the Sirte basin. In December 1999, Red Sea announced that testing on the block had been suspended. Total's Mabruk field is producing around 18,000 bbl/d, and Canadian Occidental controls but has not yet developed a potential 200-million-barrel field in Block NC-101 in the Murzuq basin. In 2001, Petro-Canada purchased Lundin's interest in the En Naga block, Concession NC177, with production in 2003 expected at about 6,800 bbl/d. Including En Naga,

Petro-Canada also has interests in over 20 producing fields in Libya, with output of more than 40,000 bbl/d (OAPEC, 2003).

Figure 3.1 shows that FOCs represented about 40% of total Libyan production per barrel crude oil per day in 2003. Also they represented about 34% of total Libyan production per barrel crude oil per day in 2001. Repsol and Total are the main FOCs involved in oil production.

**Figure 3.1: Libyan crude Oil Production by Operating Companies in mb, 2003.**



Source: Central Bank of Libya, 2004.

Overall, Libya would like FOCs help to increase the country's oil production capacity from 1.4 million bbl/d at present to 2 million bbl/d over the next five years, at a cost of perhaps \$6 billion. This would restore Libya's oil production capacity to the level of the early 1970s. During the 1970s, the country's revolutionary government imposed tough terms on producing companies, leading to a slide in oilfield investments and oil

production. In May 2000, Libya invited around 50 foreign oil and gas companies to a meeting to discuss exploration and production sharing agreements. In order to achieve its oil sector goals, Libya will require as much as \$10 billion in foreign investment through 2010. Around \$6 billion of this is to go towards exploration and production, with the rest going towards refining and petrochemicals. In addition, the NOC has earmarked \$1.5 billion for oil infrastructure investment.

### **3.7 Geographical Distribution of the Libyan Oil**

The Libyan oil is the nearest source of power to European industrial countries. Libya is a major oil exporter, particularly to Europe. During 2004, Libyan oil production was estimated at nearly 1.6 million barrels per day (bbl/d), with consumption of 237,000 bbl/d and net exports of about 1.34 million bbl/d. (Alan, 1992:12).

The vast majority (more than 90%) of Libya's oil exports are sold to European countries such as Italy (545.000 bbl/d in January-October 2004), Germany (274,000 bbl/d), France (94.000 bbl/d), Spain and Greece. In addition, Libyan oil exports to the United States reached 66.000 bbl/d in October 2004, after resuming in June 2004 for the first time in two decades. (EIA, 2005).

As Table 3.15 and Figure 3.2 show that the European Countries (EU) are the main consumer of the Libyan oil. In 1982 EU imported about 214.2 thousands barrels per day, this increased to 310.0 thousands barrels per day in 1987. Generally, the main market for the consumption of Libyan oil during the study period has been Western European Countries, which account for about 80% of Libyan oil exports.

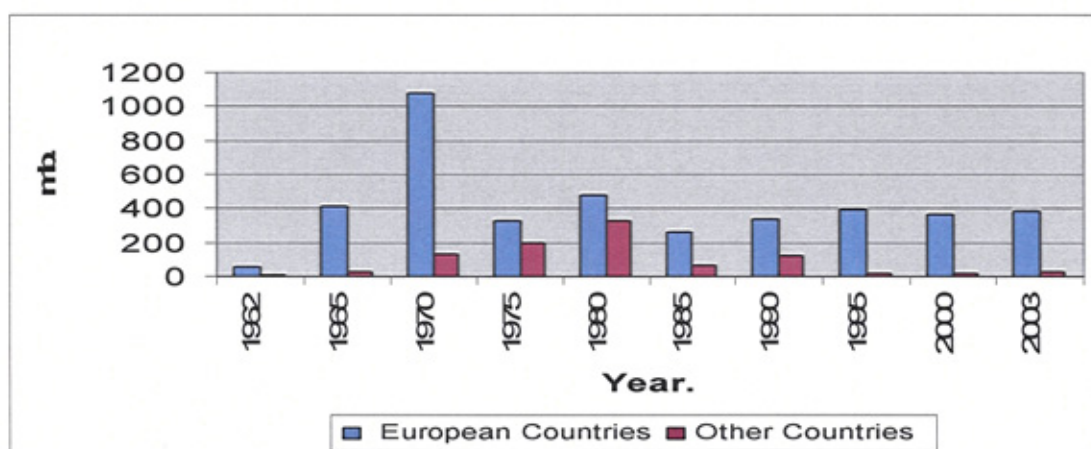
**Table 3.15: Geographical distribution of the Libyan oil exports, mb, (1962-2003).**

<b>Year</b>	<b>European Countries</b>	<b>Other Countries</b>	<b>Total Export to the World</b>	<b>% European Countries / Total World</b>
<b>1962</b>	58.12	7.39	65.50	89
<b>1965</b>	410.60	32.53	442.40	93
<b>1970</b>	1080.00	126.80	1206.80	89
<b>1975</b>	327.66	194.64	522.30	63
<b>1980</b>	475.80	328.60	644.40	74
<b>1985</b>	260.00	65.20	325.20	80
<b>1990</b>	339.09	122.42	461.50	73
<b>1995</b>	392.49	16.52	409.00	96
<b>2000</b>	361.35	17.85	379.20	95
<b>2003</b>	384.20	27.00	411.20	93
<b>Average</b>	408.93	93.89	486.75	84.62
<b>St.dev</b>	261.34	102.98	293.27	11.42
<b>C.V.</b>	0.64	1.10	0.60	0.14

Sources: OPEC, Annual Statistic Bulletin 1980 & 2000 & 2003 page No.81. Central Bank of Libya, 1983, 1988, 1995 and 2004.

Libya is a direct producer and distributor in Italy, Germany, Switzerland and Egypt. In Italy, Tamoil Italia, which is based in Milan and has approximately 2,100 service stations, controls about 5% of the country's retail market for oil products and lubricants. Agip-ENI has been the most active foreign oil producer. It has been operating in Libya since 1960 and it produces about 16% of total output. About 60% of this output comes from the Bu Attifel field.

**Figure 3.2: Geographical Distributions of the Libyan oil, mb, 1962-2003.**



Source: Central Bank of Libya, 1981, 1995, and 2004.

### 3.8 Natural Gas

Libya has vast gas reserves; proven at 1491.0 billion standard cubic meters. Although its reserves are largely unexploited and unexplored. Libya has as one of its priorities the expansion of the gas sector. It has tried to increase the domestic consumption of gas so that more oil can be exported and it also aims to increase its gas exports to European countries. Although the potential is huge, the only customers at present are Spain's Enagas and Italy's Edison Gas.

In 1971, Libya became only the second country in the world to export liquefied natural gas (LNG). However due largely to technical problems, LNG exports have stagnated. Libya is not able to extract LPG from LNG, thus forcing the buyer to do so. Libya's NLG plant was built in the late 1960s and has a capacity of 124 Bcf/year but only one third of this is available for export, mainly to Spain. There are plans to refurbish and upgrade the El Brega LNG plant in order to enable LPG separation. Should this be

successful, Libyan LNG exports could triple with likely customers including Spain, Turkey and Italy (Middle East Economic Survey, 1990).

**Table 3.16: Reserves, production & exports of natural gas, billion standard cu m.**

Year	Reserves	Production	Exports	% of Gas Exports / Production
1962	-	-	-	-
1965	-	-	-	-
1970	670.5	2.94	-	-
1975	597.7	4.635	3.33	72
1980	685.0	5.170	2.134	41.3
1985	626.0	5.200	1.230	23.7
1990	1208.0	6.200	1.240	20
1995	1313.0	6.340	1.490	23.5
2000	1325.0	5.880	0.800	13.6
2003	1491.0	6.400	0.750	11.7

Sources: OPEC, Annual Statistic Bulletin 2000 & 2003 Page No. 31.

There is also a project for a 1,500km (900 mile) pipeline from North Africa to South Europe. The pipeline could transport gas from Egypt, Libya, Tunisia, and Algeria via Morocco and through the existing pipeline into Spain (NOC, 2004). Libya's proven gas reserves are impressive at about 45 trillion cubic feet of gas in early 2002. But these reserve estimates probably substantially understate what Libya actually has because of the extended hiatus in FOCs exploration and development activities in the country. Not only has production declined but the country has not developed its enormous gas potential either for its own use or for export.

Continued expansion of natural gas production remains a high priority for Libya for two main reasons. Firstly, Libya has aimed (with limited success) to use natural gas instead

of oil domestically, freeing up more oil for export. Secondly, Libya has vast natural gas reserves and is looking to increase its gas exports, particularly to Europe.

**Table 3.17: Proven natural gas reserves, billion standard cu m (1962-2003).**

Year	Libya	Total OPEC	% of Libya /OPEC	Total World	% of Libya /World
1962	-	-	-	-	-
1965	-	-	-	-	-
1970	670.5	12616.7	5.3	47349.9	1.42
1975	597.7	18361.8	3.3	61787.3	0.96
1980	685	31937	2.1	84276	0.81
1985	626	36151	1.7	101960	0.61
1990	1208	50719	2.4	132927	0.91
1995	1313	60149	2.2	147231	0.90
2000	1325	75569	1.8	164864	0.80
2003	1491	88718	1.7	179789	0.83

Sources: OPEC, 2003: 12. OAPC, 2001.

**Table 3.18: Production of gas (in billions of Cubic feet).**

Year	Total Production	Used	Flared
1996	588.6	455.5	133.1
1997	558.0	413.0	145.0
1998	441.0	313.0	128.0
1999	482.5	350.8	131.7
2000	490.2	354.5	135.7
2001	486.2	361.3	124.9
2002	464.3	340.1	124.2
2003	493.4	365.1	128.3
Average	500.53	369.16	131.36

Source: NOC, Third Quarter 2004.



### **3.9 Refining Activity**

Libya has three domestic refineries, with a combined nameplate capacity of approximately 380 bpd, nearly twice the volume of domestic oil consumption (184.000 bpd; the rest is exported). The Ras Lanuf Refinery, located on the Gulf of Sirte, was completed in 1984 and has a capacity of 220.000 bpd. The Az Zawiya Refinery is located in north western Libya with a capacity of 140.000 bpd. The oldest refinery in Libya is the Brega Refinery, situated near Tobruk with a capacity of 20.000 bpd. In addition to its domestic refineries, Libya also has operations in Europe (Economist Intelligence Unit, 2002).

Libya is a direct producer and distributor of refined products to Italy, Germany, Switzerland, and since early 1998, to Egypt. In Italy, Tamoil Italia based in Milan controls about 5% of the country's retail market for oil products and lubricants, which are distributed through nearly 2,100 Tamoil service stations. Sanctions have constrained Libya's ability to increase the supply of oil products to European markets, however, as Libya's refineries are badly in need of upgrading, especially in order to meet stricter EU environmental standards, which have been in place since 1996. Libya is planning to build gasoline stations on the coastal road to Egypt and in other areas of that country. The stations are to be run by Libya's Oil Companies arm Oilinvest, which maintains 300,000 bbl/d of refining capacity in Europe (Middle East Economic Digest, 2002).

Table 3.19 shows that development of Libyan capacity, production, consumption and exports of refined products from 1962 to 2003. The capacity increased from 10.000 bd

in 1965 to 380.000 bpd in 2003, which is 38 fold. Production increased from 5500 bpd in 1962 to 322700 bpd in 2003, and consumption increased from 5500 bpd in year 1962 to 184000 bpd in 2003.

**Table 3.19: Capacity, production and export of refined products, 0.000 b/d.**

Year	Capacity	Production	Consumption	Exports
1962	-	5.5	5.5	-
1965	10.0	9.0	9.0	-
1970	10.0	8.7	16.4	0.8
1975	70	37.6	51.2	47.2
1980	130.0	108.6	89.5	72.5
1985	333.0	143.9	103.0	90.9
1990	342.0	278.0	100.5	150.0
1995	342.0	300.4	174.1	140.1
2000	380.0	337.8	155.5	237.0
2003	380.0	322.7	184.0	138.7

Sources: OPEC, 1980, 1990, 2001 & (2003: 23). OAPC, 2001.

Table 3.20 indicates that the export of refined products increased in 2003 by 202.9 metric tons over 2002. Exports of urea products are the highest of the refined products.

**Table 3.20: Exports of Refined Products, (0.000, M. T).**

Year	Methanol	Ammonia	Urea	Eteeline	Broobline	Mixd of 4th carbon	Total
1996	704.3	134.4	814.4	-	-	-	1653.1
1997	737.1	175.9	838.3	204.4	118.2	81.5	2155.4
1998	660.6	154.4	813.1	203.6	167.7	117.0	2116.4
1999	694.8	168.9	781.3	114.4	129.8	86.3	1975.5
2000	673.7	141.3	814.1	195.1	194.8	144.5	2163.5
2001	561.6	131.6	740.4	146.0	153.0	100.5	1833.1
2002	715.3	151.6	717.5	91.4	106.5	36.9	1819.2
2003	659.0	196.3	775.0	140.0	167.9	83.9	2022.1

Source: NOC, Third Quarter 2004.

Moreover, Libya's refining sector was hard hit by UN sanctions, and specifically by UN Resolution 883 of November 11, 1993 which banned Libya from importing refinery equipment. Libya is therefore, seeking a comprehensive upgrade of its entire refining system, with the particular aim of increasing the output of gasoline and other light products (i.e. jet fuel). Possible projects include a new 20,000-bbl/d refinery in Sebha (for which Libya is seeking foreign investment), which would process crude from the nearby Murzuq field, and a 200,000-bbl/d export refinery in Misurata.

### **3.10 The Impact of the International Sanctions (1992-1999)**

The US has imposed more than 20 sanctions on Libya since 1973. The burden of 30 years of economic sanctions had significantly limited oil exports and stagnated the Libyan economy (Phillips, 2001).

In 1992, the UN imposed sanctions which included bans on air travel, arm sales, trade in oil technology, and a freeze of Libya's foreign assets, imposed a high cost on Libya's economy (Phillips, 2001). According to the U.S. Department of State (2005) US and UN sanctions economically isolated the country for several decades (see Appendix no.12).

Iran-Libya Sanctions Act (ILSA) provided for the imposition of sanctions on foreign companies that make an investment of more than \$20 million in one year in Iran's energy sector. For Libya, the threshold was \$40 million, and sanctionable activity included exportation to Libya of technology that could be used to develop its energy sector, to develop weapons of mass destruction (WMD), to enhance its conventional

military, or to maintain its aviation capabilities (Section 5(b)(1)). These exports had been banned under Pan Am 103-related Security Council Resolutions 748 (March 31, 1992) and 883 (November 11, 1993) (Katzman, 2005).

Foreign involvement in Libya was severely reduced as a result of the sanctions and embargoes placed upon it, especially between 1992 and 1999. The brilliant success achieved in the national oil sector by the Al-Fatah Revolution has been a source of frustration for the monopoly of FOCs. Thus the sanctions attempted desperately to obstruct the march of progress in this field through:

- 1- Imposing an embargo on Libyan importation of the basic spare Parts necessary for the oil and gas industry.
- 2- Imposing an embargo on Libyan importation of tools and modern technology equipment such as computers and their accessories.
- 3- Imposing an embargo on Libyan exporation of crude oil and its products.
- 4- Imposing an embargo on Libyan exportation of petrochemical products.
- 5- Issuing laws and regulations for a comprehensive sanctions concerning trade with the Libya, which prevents American companies from conducting any business in Libya, or with any Libyan firms.

The impact on the oil industry was especially crucial as that industry constituted the backbone of the Libyan economy. Since the imposition of the U.S. embargo in 1982 Libya has been denied the industry's most modern technological expertise and equipment, and the knowledge and experience of the U.S. oil companies that established the industry. The fact that most of the Libyan oil production is still concentrated on fields developed in the 1960's made Libya more vulnerable. To maintain production at

these fields, water and gas re-injection is a prerequisite and, while Libya has an advanced oil recovery programme, it is generally accepted that it is not a substitute for U.S. technological know-how (The Middle East, October 1991: 41).

Libya's oil sector was exceptionally hard hit by the sanctions. Its three refineries have a nameplate capacity of 348,000 bpd, which is nearly twice its domestic consumption. The refineries, however, are outdated and desperately in need of upgrading, situation made more difficult as the sanctions led to equipment and technology being less accessible. And as a result of the sanctions and embargoes, especially between 1992-1999, foreign involvement in Libya was severely reduced. Access to oil industry equipment and technology was restricted.

The oil market is extremely unstable, and such volatility has serious short term effects on the Libyan economy due to high dependency on the oil revenues. Therefore, the volume of Libyan imports of various goods are affected due to its almost complete dependence on the oil earnings.

Libya's economy was hurt by the low oil prices of the late 1980s and much of the 1990s. The low oil prices meant that revenue intended for government infrastructure projects did not materialise and this resulted in the curtailment of several major development projects. The prohibition on flights into and out of Libya and the ban on certain imports also combined with low oil prices and economic mismanagement, caused a steady decline in Libyan economic life.

The crash in oil prices that began in late 1997 did, however, combine with UN and US embargo sanctions to make things worse. It reduced oil revenues for 1998 to \$5,250 million, nearly 35% less than the original forecast of \$8,073 million. This was mainly due to the prohibition of inputs of oil equipment and decreased investment by multinational companies in the oil industry.

This forced Libya to cut its budget. General secretariat of Finance Mohammed Beit al-Mal reported on December 11, 1998 that the government had been forced to cut expenditure on investment projects by 80% excluding those for the oil industry and some power projects, in order to cover salaries for the country's public sector employees. The government expected these spending cuts to limit the deficit to \$1,444 million in 1998 (EIU, 1998).

Given the rebound in oil prices and the lifting of UN sanctions, Libya's macroeconomic picture may continue to improve. As the IMF pointed out: "As a result of the lifting of UN sanctions, Libya has been able to invite European and US oil firms to return to Libya, which also has a much better prospect of receiving foreign help in its attempts at diversifying the country's economy away from oil and toward natural gas, and has kept government spending under tight control" (IMF, 2003).

Libya plans to upgrade its existing refineries and build new refineries. Even more than the sanctions themselves, the uncertainty created by them had a major impact on the economy. Among the local and international business circles there were doubts about what the future held (for more details, see Niblock, 2001: 82-90). There was also

confusion among the suppliers and contractors especially after the 1992 sanctions. Freeze of Libyan assets required a reorganisation of the payment system and that took some time. Moreover, sometimes “both local clients and European government departments [appeared] to be at loss as to how to interpret the directives drawn up by the U.N.” (MEED, 28 January 1994: 4). In more general terms the sanctions resulted in the weakening of the currency, the increasing cost of living, and the cutting of subsidies by the state.

Currency depreciation was visible on the black market where the Libyan dinar (LD) plunged to an all-time low because of both the uncertainty about how long the U.N. sanctions would remain in place and also the sharp increase in demand for travelling abroad.

Moreover, an official assessment of the economic impact of sanctions on Libya, prepared under the auspices of the Libyan secretariat for foreign liaison at the beginning of 1998, put the cost at about \$24 billion (EIU, 2<sup>nd</sup> Quarter, 1998:14). An Arab League report, prepared in mid-1998 and covering the period up to the end of 1996, put the figure at \$23.5 billion.

The impact of the sanctions started to hurt Libyan economy, even before the tightening of the sanctions, major Jallod, summed it up “Let’s admit, we have been exhausted”. In addition to the economic impact, the Lockerbie affair had serious psychological effects on Libya. It increased the sense of isolation from the international community. (Table

3.21) for example shows the value of the losses caused by the sanctions from 1998-1999 (Dorda, 2000).

The main areas of loss, according to the latter report, were the energy sector (\$6 billion), the commercial sector (\$5.8 billion), the industrial sector (\$5.1 billion), the transportation and communications sectors (\$2.5 billion), and the agricultural sector (\$337 million (EIU, (3), Quarter, 1998:17). Although these may represent accurate estimates of the scale of damage done, they will not be used here to evaluate the economic impact of sanctions. In fact, “the real effects have been more complex and nuanced and cannot be conveyed by simple monetary figures” (Niblock, 2001: 189).

**Table 3.21: The value of the losses caused by the sanctions from 1998-1999.**

Effects	L.D in billion
Additional costs and medical providing damage	7.00
Additional costs for private abroad treatment	7.00
Additional costs for internal treatment	14.00
Damages in medical tools	9.00
Additional costs for internal ambulance	1.50
Additional costs for air ambulance	9.00
Damages in initial medical care	5.00
Other losses	2.00
Total	54.500

Source: Dorda, 2000.

Libya experienced severe inflation over the sanctions period. This stemmed in large part from the indirect effects of sanction, combined with greater dependence on the private sector to import goods. Goods that were subject to sanctions (such as those for the downstream operations of the oil industry) were thus acquired by indirect means, which meant substantial payoffs to third parties. The higher prices for imported goods,



however, were not restricted to those banned by sanctions. Without air links to the outside world, and with international business and institutions wary about conducting business with Libya, there was a general upward pressure on prices. Prior to sanctions, some 30% of Libyan imports reached the country by air shortages, created by the inability of Libyan authorities to respond quickly to consumer needs, meant that goods soon commanded prices above the levels set by the state.

Currently, Libyan crude oil production is 1.4 million bpd. This represents less than half its peak production output of 3.3 million bpd in 1970, a decrease due mainly to the direct and indirect effects of sanctions. Libya would like to attract foreign investment to the oil and gas industry to increase the production.

The Libyan economy benefited from the windfall earnings resulting from the Gulf crisis. However, since then it has suffered from the effects of fluctuating oil prices and the U.N. embargo. The fact that there was no budget from April to December 1993 reflected the chaotic state of the economy. Because of the 1993 oil price slump external earnings for the fiscal year ending 31 March 1993 were 13 percent less than projected according to the governor of the central bank (MEED, 1994).

Libya is hoping to reduce its dependency on oil as the country's sole source of income, and to increase investment in agriculture, tourism, fisheries, mining, and natural gas. Libya's agricultural sector is a top governmental priority. It is hoped that the Great Man Made River (GMR), a five-phase, \$30-billion project to bring water from underground aquifers beneath the Sahara to the Mediterranean coast, will reduce the country's water

shortages and its dependence on food imports. Libya is also attempting to position itself as a key economic intermediary between Europe and Africa, has become more involved in the Euro-Mediterranean process, and has pushed for a new African Union. In April 2001, members of the Arab Maghreb Union (AMU) including Algeria, Libya, Mauritania, Morocco, and Tunisia agreed to encourage intra-regional cooperation on trade, customs, banking, and investment issues (Khaled, 2004).

Access to oil industry equipment and technology was restricted, and Libya is reliant on foreign investment to keep the industry active. After almost 10 years, sanctions were lifted against Libya in 1999, following the extradition of the two suspects in the bombing of the Pan Am flight over Lockerbie. With the suspension of sanctions, oil companies have shown an eagerness to invest in Libya, and a poll of 76 FOCs indicated that Libya is the number one preferred location for oil exploration and production.

The low Libyan operating costs, its light, sweet oil, abundant natural gas reserves and ready access to European markets could make Libya one of the industry's most attractive production areas at least from the technical point of view. In 1999, following the lifting of sanctions by the UN, the United States gave permission to US companies to visit Libya to investigate the assets that they left behind during the embargo. Libya has stated that it still recognizes the oil companies' rights to the fields that they left behind (OPEC, 2003).

### **3.11 Conclusion**

Libyan oil was discovered in mid 1959 by FOCs, which were exercising exploratory and drilling activities under concession contracts covering an area of 600.000 km<sup>2</sup>. Actual production started in September 1961, and by the end of 1969, Libya's production amounted to 15.4% of OPEC's total and 7.5% of the world's total. With the occasion of the Al-Fatah of September Revolution, revolutionary measures were enacted to halt this depletion. In 1962, Libya joined OPEC.

Libya is Africa's major oil reserves, producer and one of Europe's biggest North African oil suppliers. Supplies from North Africa to Europe destinations have the advantage of being both timely and cost effective. The low Libyan operating cost profile, its light, sweet oil, abundant natural gas reserves and ready access to European markets could make Libya at least from the technical point of view one of the industry most attractive production areas.

Libya's economy is based on oil and exports contribute between 90-95% of State revenues. Libya has proven reserves of 46 billion barrels of oil and a production capacity of 1.4 million barrels per day. European Countries accounts for 80-90% of the Libya's exports. Falling oil prices have led to a downturn in trade and future issues making payments. The country economic future is dependence on the slide in oil prices.

Although oil revenues and a small population give Libya one of the highest per capita GDPs in Africa, Libya's gross domestic product grew in 2001 due to high oil prices, the end of a long cyclical drought, and increased foreign investment following the

suspension of UN sanctions in 1999. Although UN sanctions were suspended in 1999, foreign investment in the Libyan oil and gas sector has been severely curtailed due to the United States' Iran and Libya Sanctions Act (ILSA), which caps the amount any foreign company can invest in Libya.

Foreign involvement in Libya was severely reduced as a result of the sanctions and embargoes emplaced upon it, especially between the years of 1992 and 1999. Access to oil industry equipment and technology was restricted and Libya is reliant on foreign investment to keep the industry active. The oil sector was very badly hit by the sanctions and this constrained Libya's ability to increase its supply of products to Europe. After almost 10 years, sanctions were lifted against Libya in 1999, following the extradition of the two suspects in the bombing of the Pan Am flight over Lockerbie. With the suspension of sanctions, oil companies have shown an eagerness to invest in Libya, and a poll of 76 global oil companies (New Ventures 2000 survey) indicated that Libya is the number one preferred location for oil exploration and production.

## **CHAPTER FOUR**

### **THE DETERMINANTS OF FDI: A THEORETICAL EXAMINATION.**

#### **4.1 Introduction**

Before examining the relevant literature of foreign direct investment (FDI), it is first necessary to define FDI. In theories of FDI, numerous definitions of the phenomenon have been put forward. The key element of all of these definitions is that investors exert and maintain a degree of control in an investment enterprise outside their home country. Differences tend to centre on issues of what constitutes a sufficient investment share for the foreign investor(s) to establish a degree of control in the investment enterprise.

The purpose of this part of the study is not to redefine the concept of FDI, or to examine in detail the various definitions which have been offered, but simply to establish the definition which will be used in this study, which is the benchmark definition of the Organization for Economic Cooperation and Development (OECD). This states that:

“Foreign direct investment reflects the objective of obtaining a lasting interest by a resident entity in one economy (‘direct investor’) in an entity in an economy other than that of the investor (‘direct investment enterprise’). The lasting interest implies the existence of a long-term relationship between the direct investor and the enterprise and a significant degree of influence on the management of the enterprise. Direct investment involves both the initial transaction between the two entities and all subsequent capital transactions between them and among affiliated enterprises, both incorporated and unincorporated” (OECD, 1996a:7).

The OECD definition assumes that:

“A foreign direct investor is an individual, an incorporated or unincorporated public or private enterprise, a government, a group of related individuals, or a group of related incorporated and/or unincorporated enterprises which has a direct investment enterprise - that is, a subsidiary, associate or branch - operating in a country other than the country or countries of residence of the foreign direct investor or investors. OECD recommends that a direct investment enterprise be defined as an incorporated or unincorporated enterprise in which a foreign investor owns 10% or more of the ordinary shares or voting power of an incorporated enterprise or the equivalent of an unincorporated enterprise” (OECD, 1996a:8).

The OECD itself recognizes that the 10% investment threshold recommended is, in many ways, an arbitrary figure (OECD, 1996a:8), as investors with an investment share of less than 10% may exert significant control in the operation of an enterprise, while those with a share in excess of 10% may exert little control. However, the figure set by the OECD is no more or no less arbitrary than alternatives suggested in other definitions of FDI.

### **IMF Definition of FDI**

FDI is the category of international investment that reflects the objective of a resident entity in one economy (“direct investor” or parent enterprise) obtaining a ‘lasting interest’ in an enterprise resident in another economy (“direct investment enterprise”).

The two criteria incorporated in the notion of “lasting interest” are:

- 1- The existence of a long-term relationship between the direct investor and the enterprise and,
- 2- The significant degree of influence that gives the direct investor an effective voice in the management of the enterprise.

## 4.2 Theories of FDI

Literature and numerous theories have been produced which seek to explain FDI.

However, as Lizondo (1991:79-80) explains:

“At present there is no unique, widely accepted theory of foreign direct investment. Instead, there are various hypotheses emphasizing different microeconomic and macroeconomic factors that are likely to affect it. While most of these hypotheses have some empirical support, no single hypothesis is sufficiently supported to cause the others to be rejected.”

This view is shared by Dunning (1993b:63-68) who, like Caves (1971, 1996), argues that the pursuit of a general theory is an impossible and, perhaps, even a counter-productive task:

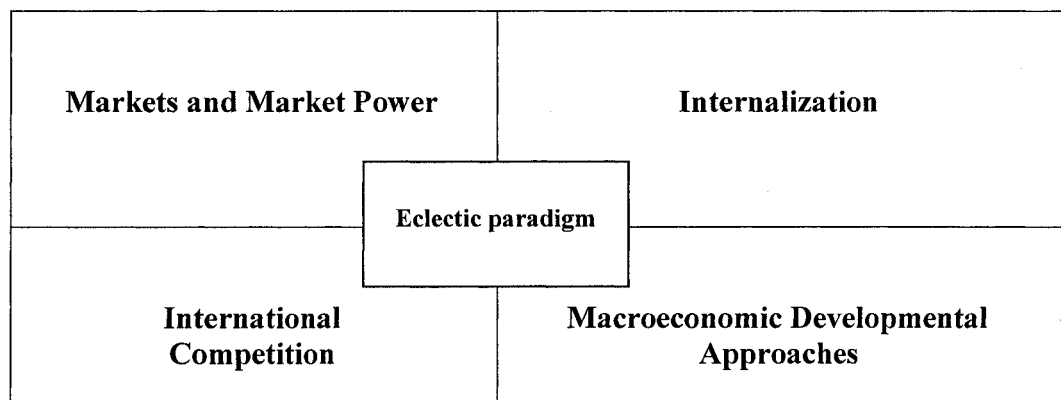
“The types of foreign value-added activities undertaken by MNEs may be very differently motivated. Because of this, it is difficult to perceive an all-embracing theory of the determinants of these activities in the sense of encompassing, within a single explanatory equation, a set of variables that can fully explain each of them at the same time. The most the economist or business analyst can reasonably do is to formulate paradigms to provide an analytical framework for explaining various kinds of MNE activity or theories designed to explain particular kinds of FDI ... it is not possible to formulate a single operationally testable theory that can explain all forms of foreign-owned production any more than it is possible to construct a generalized theory to explain all forms of trade or the behaviour of all kinds of firms”.

FDI has been researched across a range of disciplines in the field of international business, from economics to organizational behaviour and strategic management. Political, social and cultural explanations of FDI have also been put forward. The purpose of this chapter is not to provide a comprehensive review of FDI literature, but to review some of the key theories of the determinants of FDI. More detailed reviews can be found in Agarwal (1980), Lizondo (1991), Cantwell (1991), Dunning (1993) and Meyer (1998).

This chapter will first look at market and market power approaches to FDI, including a brief examination of the role of governments in determining FDI. This is followed by an examination of internalisation theory, essentially a theory of the firm, which seeks to explain FDI. Models based on theories of international competition will form the focus of the third section and macroeconomic developmental approaches the fourth. Finally, the eclectic paradigm (Dunning, 1977, 1981b), the synthesis of FDI theory and the most widely accepted framework of FDI analysis, will be reviewed.

From this examination of the various theories of FDI, the key motivations for FDI will be extracted. These motivations will then be tested in an analysis of empirical data to determine which is, or are, the key motivations or determinants of FDI inflow to the Libyan oil sector.

**Figure 4.1: Theories of the Determinants of FDI: Towards a Synthesis.**



#### **4.2.1 Markets and Market Power Approaches**

The existence of MNEs represents a stark contrast to the orthodox, neo-classical view of international economic activity. The International Theory of Trade is based on the



principle of comparative advantage and the assumption of perfect competition. Under these conditions, countries specialise in activities which utilise factors of production abundant in that country. Economically advanced countries tend to be characterised by abundant capital and labour scarcity and therefore export capital-intensive goods to poorer countries, where capital is scarce and labour abundant, in exchange for goods requiring labour intensive production in accordance with the Heckscher-Ohlin model (see Heckscher, 1919; Ohlin, 1935).

Early post-war attempts to explain FDI tended to focus, therefore, on the presence of imperfections in international markets and to view FDI as a partial substitute for trade in these circumstances. Mundell's Factor Endowment Theory (Mundell, 1957), for example, is based on a Weberian view of cross-border capital. Mundell explores the hypothesis that if barriers to the free movement of goods across borders exist, cross-border capital flows can provide a substitute to trade. Essentially, under-consumption or a decline in the rate of profit causes firms to seek an outlet for 'surplus' capital. Firms therefore transfer capital to capital scarce countries in search of higher rates of return. FDI is therefore a second-best option as it reduces trade and, by failing to maximise factor-cost endowments, leads to inefficient resource allocation.

A number of FDI theories have been developed based on factor costs and barriers to trade. These theories will be examined in more detail in the following sections of this chapter.

#### 4.2.1.1 Factor Markets and Factor Costs

- **Capital Markets Approach**

According to Aliber (1970, 1971), the relative strength of currencies is the key factor determining FDI patterns. This hypothesis is based on his argument that:

“The pattern of Direct Foreign Investment reflects that source-country firms capitalize the same stream of expected earnings at a higher rate than the host country firms. This difference in capitalization results because the market (the world-wide family of investors) attaches different capitalization rates to income streams denominated in different currencies. Source-country firms are likely to be those in countries where the capitalization rate is high; host-country firms are those in countries where capitalization rates are low” (Aliber, 1970).

In other words, differences in capitalisation rates for equities (or the cost of capital to the firm), result in a premium on the rate of discount charged implicitly by investors in equities denominated in currencies deemed ‘weak’. Investors by nature tend to be risk averse, therefore weak currencies, which are likely to depreciate, are subject to bias in capital markets. As a result, they incur higher interest rate schedules or ‘currency premiums’. Firms in countries with strong currencies will therefore benefit from ‘weak currency-held’ equities that enjoy a higher rate of capitalisation than firms based in the weak currency country, where the currency premium applies. This encourages the acquisition of assets by strong currency companies in weak currency countries.

Liu (1997:28) argues, however, that Aliber’s reasoning does not necessitate FDI, since the same result can be achieved by means of a mutual fund invested in foreign capital markets (see also Jacquillat and Solnik, 1978). The concept of FDI as a country phenomenon, based on international arbitrage, is also questioned by Liu who claims that

the evidence shows greater concentration of FDI by industry.

Gray (1982) criticises Aliber's theory on a number of points. It assumes that the equity market will capitalise the flow of earnings from the foreign subsidiary at the capitalisation rate applied to revenues denominated in the source country currency, rather than that applied to revenues denominated in the weaker, host-country currency. This is an unrealistic assumption, even if equity markets only display reasonable efficiency.

Gray further argues that the flow of FDI as a result of different capitalisation rates may actually be the reverse of that argued by Aliber. If equity is financed internally through retained earnings, weak currency firms may seek to invest in the strong currency country to benefit from a higher capitalisation rate.

Lizondo (1991) and Liu (1997) also question the ability of Aliber's theory to explain flows within currency areas or industrial concentrations of FDI. However, Aliber accounts for this in terms of retained investments made at a point in time when relative capitalisation rates were different, and inadequacies in the ability of markets to price patents (Aliber, 1970:33).

Despite the various criticisms made of the theory, it does provide a useful explanation of FDI in terms of multinational enterprises (MNEs), which are able to raise funds by selling equity at a better rate in the strong currency home market, having a cost

advantage over local competitors operating in weak currency markets.

Agmon and Lessard (1977) also explain FDI in terms of capital flow. They present FDI as a means of international portfolio diversification in imperfect capital market conditions. In perfect capital markets, investors have no need to carry out portfolio investment through firms, as diversification can be achieved directly without the need for 'third parties'. Agmon and Lessard's model assumes however, that imperfections exist, creating barriers to portfolio investments which are greater than those facing FDI. They also assume that the diversification opportunities presented by FDI can be identified by investors. In this model, therefore, FDI provides an alternative means of diversification in conditions of portfolio capital market failure. A similar hypothesis has been put forward by Errunza and Senbet (1981, 1984).

According to Lizondo (1991), however, the evidence supporting the portfolio hypotheses tends to be weak and the hypotheses themselves theoretically inadequate. It is not clear why, in bidding for particular firms, foreign citizens and firms would have an advantage over domestic citizens and firms, or why expected exchange rate fluctuations would lead to FDI rather than portfolio investment. Meyer (1998:62) lends support to the latter argument on the basis that:

"In recent years, the international liberalisation of financial markets has made this motive for DFI [Direct Foreign Investment] increasingly irrelevant with respect to investment between industrialized countries, which accounts for most FDI."

The explanation of FDI put forward by Froot and Stein (1991) is also based on capital

market imperfections, but in this scenario exchange rates are the key determinant of FDI. FDI is associated with low real value of domestic currency where imperfect information leads to a situation where external finance is more expensive than internal finance. A real depreciation of the domestic currency increases the wealth of foreign firms and individuals relative to domestic firms and individuals, encouraging capital investment and the acquisition of assets from abroad. According to Stevens (1977), however, currency fluctuations can have a two-fold effect on FDI. For example, according to his model, import-substituting FDI will decrease as a result of an appreciation in the price of foreign currency, while export-oriented FDI will increase.

US data displayed a negative correlation between the real value of the US dollar and US FDI inflows. Caves (1998) and Stevens (1993) also found evidence of a negative relationship between FDI and exchange rate levels using data on FDI inflows into the USA.

The roots of this hypothesis can be found in earlier work by Logue and Willet (1977). They argued that, if risk levels remained constant, foreign currency devaluation effectively decreases the share of foreign assets held by investors, and that foreign assets would be bought and/or domestic assets sold in order to rebalance the portfolio.

Real currency devaluations also reduce the costs of producing abroad and so may prompt MNEs to relocate production as a means of cost minimisation, substituting exports for FDI in the process Kohlhagen (1977). Similarly, producing in more than one

location allows firms to respond to and reduce the risks resulting from changes in real production costs locally Kogut and Kulatilaka (1994). Adopting a strategy of FDI may also be used as a means of reducing exchange rate risk, as it limits risk exposure to repatriated profits Batra and Hadar (1979) and Cushman, (1988). Rugman's risk diversification hypothesis Rugman (1979) examines the possibilities of FDI as a means of hedging risk in more detail.

Empirical tests also indicate that, in terms of cost minimisation, the cost of borrowing, using interest rates as a proxy, is perhaps more significant than exchange rates Cushman (1985). Clegg (1998), however, argues that, while evidence can be found in support of both exchange rates and interest rates as motives for FDI in the EU, this is largely due to the use of data on new capital outflows and that "real motives for FDI flows may well dominate over the financial motives" Clegg (1998:123).

- **Labour Markets**

If international production is based on factor costs as trade theory suggests then, as cost minimisers, firms will seek to produce where the relative cost of labour is lowest. Relative labour costs have been the subject of a number of studies examining the determinants of FDI, particularly from the developed countries to the LDCs. Evidence has been found to support this notion from studies of FDI into South East Asia (Young, 1978; Tsai, 1991). In a study of German FDI in several Latin American countries, Juhl (1979) also found that the difference in relative wages and FDI were positively correlated.

Evidence has also been found to support the notion of wage-rate differentials as a determinant of FDI between developed countries. In his study of FDI flows into Ireland, O'Sullivan (1993) found that the slower rate of growth of wages in Ireland (compared with other than EEC countries and the US) combined with changes in the exchange rate, was a major determinant of FDI. Kravis and Lipsey (1982), however, found that labour costs played only a marginal role in determining FDI flows. They found a much stronger correlation between market size and FDI.

More recent research has revealed that costs are not the sole determinant of FDI with regard to labour. Contrary to classical economic theory, labour is not an homogeneous factor. The availability of skilled labour may also be an important consideration for many multinational companies. In their survey of foreign MNEs in Colombia, Steiner and Giedion (1995) examined a number of microeconomic variables related to factor inputs, including competitive salary structure, but found that the presence of a skilled labour force was the only significant microeconomic factor.

- **Tangible and Intangible Resources**

There are essentially three types of resource seekers Dunning (1993b). One of these groups consists of MNEs seeking cheap labour sources via FDI (discussed above). A second group consists primarily of producers of primary goods and manufacturers aiming to secure the supply of and minimise the cost of raw resources. Certain natural resource related service industries, such as oil drilling, can also be included in this group. According to Caves (1996:215) the motivation for this type of FDI in extractive

industries is so clear that no explanation is necessary. Natural resource endowment has been a major factor in attracting FDI to even some of the least developed countries. Lim (1983), for example found a strong, positive correlation between mineral endowments and FDI using statistical data for 27 LDCs.

The third group is motivated by the need to gain access to ‘invisible’ or intangible assets, such as technological capability or human capital. These may be collaborative joint ventures or ‘listening posts’. While MNEs possess ownership advantages that give them their competitive edge in foreign markets, the acquisition of foreign assets allows MNEs to add to their portfolio of advantages. Grabher (1993) argues that this type of FDI is increasing and that it is likely to grow as MNE subsidiaries become more integrated in their host economies.

Differences in relative factor costs generally offer MNEs (particularly vertically-integrated MNEs) economies of scale and scope. This allows specialised activities to be carried out where factor endowments and factor costs minimise the costs of the various activities carried out by particular subsidiaries globally, internationalising the division of labour. According to Dunning (1993b:78) this is because:

“The unique characteristics of the MNE is that it is both multi-activity and engages in the transfer of intermediate products across national boundaries. It is the inability of the market to organize a satisfactory deal between potential contractors and contractees of intermediate products that explains why one or the other should choose the hierarchical route for exploiting L-specific [location-specific] assets between countries.”



Mirza et al, (1998) found, for example, that a significant number of US MNEs in Japan carried out their manufacturing activities outside Japan, as goods meeting high Japanese standards could be produced at lower cost and higher levels of productivity elsewhere.

#### **2.1.1.1 Market Size**

While scholars continue to examine the seemingly strong influence of factor markets in determining FDI, it has become clear that factor markets alone are not enough to explain FDI. In the pre-war years, FDI flows had been dominated by resource extraction by MNEs from the industrial nations in LDCs, but after World War II the pattern began to shift towards manufacturing MNEs and FDI between regions of economic similarity Hood and Young (1979). Traditional neo-classical models could not explain the growth in simultaneous bi-lateral investment between the industrialised countries or simultaneous bilateral investment within a particular industry. A new approach was therefore required.

As stated, scholars such as Kravis and Lipsey (1982) found that there was a stronger correlation between market size and FDI than between FDI and factor costs, though these motives are not necessarily exclusive. There are essentially two market size hypotheses. According to Agarwal (1980:746) they are “practically two sides of the same coin”

At the micro level, the output hypothesis explores the relationship between FDI and output or sales in the host country. This relationship is assumed to be positive. Similarly

the market size hypothesis relates FDI to output and sales, but the relationship is examined at a macro level, using GNP or GDP as proxies for market size. Both hypotheses are essentially an extension of neo-classical theories of domestic investment see e.g. Jorgenson (1963), in which FDI increases with sales and domestic GDP. This approach was used by Kwack (1972), who found that the outflow of FDI from the US was determined by the value of foreign output.

Bandera and White (1968) using GDP as a proxy for the market growth of host countries, concluded that the flow of US FDI into the then EEC was driven by the desire to penetrate growing EEC markets. Further evidence of this correlation was found by Scaperlanda and Mauer (1969), using data on US FDI in the then EEC. Stevens (1969) found similar evidence for US FDI flows into Venezuela, Brazil and Argentina.

Goldberg (1972) concluded that US FDI flows into the then EEC were determined by EEC market growth and not the size of the host markets per Se, while Reuber et al, (1973) concluded that the flow of FDI into LDCs was positively correlated with GDP, but not with the growth of GDP. A more dynamic view was taken by Schwartz (1976) who argued that market size and growth were the key determinants of initial investments by firms in a particular country, but that any subsequent investments in that country were more likely to be determined by the sales and profits from the initial investment(s).

According to the surveys by OECD (1983) and supported by Moore (1993) that there is

strong correlation between market size and growth, measured by GDP and economic growth rates, and the FDI inflows.

Much of the theorising and empirical work on market size has been restricted to manufacturers, but market size is not just a concern for manufacturers. It is, perhaps, of even greater concern in the services sector. Often banks, hoteliers, construction companies and other service providers, by their very nature, require a direct presence in foreign markets. Market seeking or market penetration is therefore considered a major factor in the FDI strategies of service companies Erramilli and Rao (1990), which in recent years have accounted for a growing share of global FDI Dunning (1993a, 1993c).

Market size and market potential are also of significance here, according to Dunning (1993a), the possibility or fear of 'losing' markets by not engaging in FDI may play a large part in determining FDI as the possibility of gaining entry to new markets per se.

As stated, MNEs are cost minimisers. Operating at a geographical distance from target markets incurs costs as a result of physical distance, such as transport costs, but also psychic or cultural distance. This may be defined as:

“the sum of factors creating, on the one hand, a need for knowledge, and on the other hand, barriers to knowledge flow and hence also for other flows between the home and the target countries” Luostarinen (1980:131-132).

In this respect FDI afford companies and managers a greater familiarity with the target market Johanson and Wiedersheim-Paul, (1975); Buckley and Casson (1976); Johanson and Vahlne (1977); Kogut and Singh, (1988); Gomes-Casseres (1989); Barkema et al,

(1996), but it is also argued that the growth of a strong expatriate community may influence host countries in a way that reduces cultural differences and that makes the local business environment more conducive to foreign firm participation Anderson and Gatignon (1986).

O'Grady and Lane (1996), however, argue that there may be a psychic distance paradox. Using data from Canada and the USA, they seek to qualify the psychic distance concept, arguing that in psychically close countries, assumptions of similarity can prevent foreign subsidiary managers from learning and responding to cultural differences.

#### **2.1.1.2 Market Access**

Market size may be a key motive for FDI, but this alone does not necessarily explain why firms choose FDI over exports to target markets. According to Horst (1972) the presence of tariff barriers represents the key motivation for FDI. Using this approach, FDI acts as a substitute to trade, as in Mundell's theory Mundell (1957), allowing MNEs to circumvent trade barriers and gain entry to target markets from within by establishing 'Trojan Horse' subsidiaries. Orr (1975) has disputed this hypothesis, while Baldwin (1979) has argued that the presence of tariff barriers is insignificant. However, studies by Petrochilos (1989) and Moore (1993) lend support to the notion that FDI is sensitive to tariffs.

Tariffs may not be the only barrier to market entry. Non-tariff barriers may also exist.

For example, MNEs may find that meeting specific product standards set by the host country government, or simply having to adapt products to local cultural tastes and requirements to access the market effectively, requires a local presence in the host market. Mirza et al, (1996) found this to be a significant factor in their study of US and European FDI flows to Japan.

#### **2.1.1.3 Markets: The Role of Government**

Tariff and non-tariff barriers to trade are just some of the ways in which governments can influence FDI. Host governments are likely to have a major influence on FDI in terms of their attitude towards FDI and the operating environment in which foreign (and domestic) companies are forced to conduct business. The role of the home government, though largely neglected by the literature, may also be of some significance in determining FDI.

The level of political instability is considered to have a negative impact on FDI in the majority of survey studies. Aharoni (1966) and Swansbrough (1972) and Petrochilos (1989) for example, all found a negative correlation between FDI and political instability. The evidence is, however, mixed. According to Reuber et al, (1973 and Levis (1979), political considerations of this nature play at best a secondary role in the decision to invest. They found that economic considerations were of far greater significance. These findings are also supported by Kobrin (1976), who found that market size and potential were the key forces driving US direct investments, while the correlation between political instability and FDI was insignificant. In a study of Ghana

and Côte d'Ivoire, McMillan (1995:164) found that:

“Political instability was more likely to be followed by decreased FDI when the economic factors were already weak. The implication is that economic pull factors for FDI are stronger than the negative impact created by political instability. Political stability, while perhaps not a strong pull factor in itself, certainly seems to contribute to a more positive investment environment.”

Government policy with specific regard to FDI is also considered to play a part in determining FDI. Incentive schemes can be provided by either the host or the home government (see e.g. OECD, (1990) for LDCs or OECD, 1996b for CEE and CIS countries). These may be direct or indirect via wider aid programmes and initiatives, or part of economic policy. Fiscal incentives have been the subject of several studies but, according to Balasubramanyam (1984) and McMillan (1995), they do not have a positive effect on FDI flows. This view is supported by Cable and Persaud (1987), who argue that:

“The policies that have had the greatest impact both in attracting FDI and ensuring high social returns to the host country are not special incentives, but countries' principal economic policies. Financial, fiscal and trade policies are by far the most important. Together they set the price levels in relation to the rest of the world” Cable and Persaud (1987:10).

This view is empirically supported by Lim (1983) and Shah and Teye (1978), who found a strong, negative correlation between FDI and fiscal incentives. They argue that this is due to an illusory compensation effect that occurs when host governments use incentives as a means of compensating for a basic lack of resources and a low level of economic development. In other words, in lieu of 'natural' locational advantages, host governments try to create 'artificial' locational advantages through incentive schemes as a means of attracting FDI Page (1987).

The home government may also play a significant role in determining FDI beyond merely providing incentives. For example, all else being equal, MNEs are more likely to invest in countries dependent on their home government for credits, aid, exports or technology. This is based on Evans' hypothesis that in such a situation of dependence, actions taken by host governments that conflict with the interests of MNEs may prove costly, for example in terms of the future flow of aid, thus reducing the risk of adverse host government policy.

#### **2.1.1.4 Market Power**

The above analysis explains how host market power may act as a 'pull factor' motivating FDI. However, the propensity of home markets to act as a 'push factor' in determining FDI has also been the focus of much research. One problem with the orthodox neoclassical explanations of FDI was that they tended to take a macroeconomic approach. This problem was addressed by Hymer (1976), who applied a theory of the firm to international production as a means of explaining FDI.

According to Hymer, the firm is a means by which producers are able to extend their market power. As firms grow, they increase their market share, not just by expanding production, but by take-overs and mergers, resulting in industrial concentration. The theory assumes that as industrial concentration increases, profits rise. This process continues until the opportunities for further concentration in the domestic market become so scarce that firms are forced to look beyond the domestic market and invest their monopoly or oligopoly rents abroad. The process of industrial concentration then a

to the host country. In Hymer's model, which adapts earlier work by Bain (1956, 1959) on MNEs, the firm or MNE actively raises entry barriers and engages in collusion, building up a large domestic market share. This is then used as a platform from which the firm seeks to replicate its domestic market share in international markets.

Subsequent work by Kindleberger (1969) sets FDI more firmly in the context of the structure- conduct-performance model associated with industrial organisation. His approach views MNEs as products of monopolistic competition between differentiated products, rather than oligopolistic interaction. Caves (1971, 1996) argues, however, that FDI, which includes a variety of international business activities, could not be explained by any single factor. He proposes that FDI resulting in vertical integration (mainly resource-based) is a means by which MNEs are able to reduce oligopolistic uncertainty and, at the same time, raise entry barriers to competitors. However, the MNE's ability to differentiate products through possession of unique assets is the key to understanding MNE behaviour in EDT resulting in horizontal integration.

According to Cantwell (1991) the use of industrial organisation approaches is largely due to changes in the phenomena under examination. The focus of Hymer's study was an examination of why firms invested abroad, rather than on how MNEs' international operations are organised, which is the focus of more recent research into FDI.

Based on the monopoly capitalism hypothesis presented by Baran and Sweezy, (1966) have extended the market power hypothesis, arguing that FDI is not just a means by



which MNEs increase their market share, it is also a means by which they are able to raise their profit share. They argue that MNEs have greater bargaining power in international labour markets as they are able to shift production between different locations and they are able to subcontract work internationally as well as nationally, thus reducing the collective bargaining power of the firm's labour force.

Porter (1990) has focused on the competitive nature of the home market per se as a determinant of FDI. He argues that a strong, competitive domestic market creates conditions in which firms are constantly seeking improvement. The ability to 'adapt and survive' in such a market ensures that firms are adequately prepared to 'graduate' to the international market as well as competing with firms from the same region. In many ways, the market acts as both a 'pull' and a 'push' factor for FDI, creating highly competitive companies capable of becoming MNEs and creating an attractive, dynamic market for market-seeking FDI.

According to Porter's model the ability of a country (or more precisely, firms from that country) to compete in international markets is determined by a set of interactive attributes; factor conditions, demand conditions, firm strategy, structure and rivalry and the level and composition of support and related industries. Surrounding and influencing these variables are two exogenous variables: chance and the role of government.

According to Dunning (1992, 1993a), however, Porter's analysis does not account for the ways in which the organisation of cross-border markets and the ownership structures

of firms both influence and are influenced by national competitiveness. He therefore adds a third exogenous variable to 'Porter's Diamond': multinational business activity. Dunning argues that the influence of inward and outward flows of FDI on national competitiveness, as set out in the diamond, will vary according to the specific nature of the MNE activity and the locational characteristics of both the home and host countries.

#### **4.2.2 Internalisation Approach**

Hailed by Rugman (1982:11) as "The Modern Theory of the Multinational Enterprise (MNE)", internalisation theory has become the predominant approach to the study of MNEs. According to the early theorists, the decision to externally market or to adopt an internal strategy is based on transaction costs and internal costs. Coase (1937) first used the concept of transaction costs to explain the behaviour of firms.

Coase argued that firms entering any market are subject to transaction costs, such as brokerage costs, contractual costs, risk and taxation. In deciding their strategies firms set these costs against the costs of operating internally. If internal costs exceed transaction costs, companies will market their unique assets externally. However, if transaction costs are higher, the company will adopt an internal strategy.

Underpinning the internalisation theory is the assumption that MNEs are in possession of certain unique assets or firm-specific advantages. Hymer (1976) argued that firms operating abroad incur extra costs compared to local companies. These costs arise due to locational differences in culture, language, legal frameworks, etc. and due to the

operational disadvantages faced by MNEs which have inferior local knowledge and which are operating at a distance from the parent company see also Hood and Young (1979). Hymer (1976) proposed that firm's engaging in FDI must therefore possess unique assets to which local firms are denied access and which more than compensate for the extra costs of operating as a foreign enterprise. These assets were, he proposed, the distinguishing feature of MNEs.

This hypothesis was expanded by Kindleberger (1969) who identified a number of key sources of unique advantages, including superior access to capital, patented and proprietary knowledge, strong brand names, superior management and marketing skills, government control of output and economies of scale. To enable companies to exploit these assets via FDI, however, Kindleberger argued that they needed to be firm-specific and easily transferable to foreign subsidiaries.

Johnson (1970) argued that superior knowledge, protected from duplication by patents or its proprietary nature, was the primary source of firm-specific advantage. According to Caves (1971 and 1996), however, there is no single source of firm-specific advantage, since different types of FDI will have different explanations.

Ownership of firm-specific advantages creates a limited monopoly allowing the firm to enjoy economic rent. However, possession of unique assets alone does not explain why firms choose to operate across international borders. Assuming perfect market conditions, MNEs could instead simply sell their unique assets to foreign companies at

the appropriate price. That so many companies have chosen to adopt FDI strategies is, according to the theory, evidence that the market conditions in which they operate are imperfect.

The internal market is therefore a means by which firms can exploit their unique assets where regular market mechanisms fail. This occurs when the unique asset or good in question displays public good characteristics, but where there are costs involved in the generation of the 'good' Johnson (1970); Magee (1977). This is particularly so in the case of intangible, knowledge-based assets, such as marketing techniques or management skills. By adopting an internal approach the firm is able to prevent its 'public good' assets from becoming public property by creating a monopolistic internal market. According to internalisation theorists, therefore, MNEs are simply organisations which use internal markets to produce and distribute their products efficiently in situations where 'normal' market mechanisms have failed.

Buckley and Casson (1976) developed an internalisation framework based on three key assumptions: firms operate in markets to maximise profits, market imperfections exist providing an incentive for firms to bypass the markets, internalising exploitation of their unique assets, and finally multi-nationalisation occurs when internalisation takes place across borders.

In neo-classical terms, however, internalisation is a sub optimal-strategy. By adopting an internal strategy, the firm in a sense becomes an alternative to the market. Resource

allocation and other decisions normally made by the invisible hand of the market, are now taken by the visible hand of the management hierarchy of the firm. This shift involves higher, 'internalisation' costs which limit the firm's ability to maximise the long-term rent accruing to its unique asset.

Proponents of the theory, such as Rugman (1981), argue that internalisation theory provides an acceptable general theory of FDI in the sense that it is able to predict circumstances in which firms will adopt FDI strategies to internalise foreign markets. Others such as (Buckley, 1990) seem to follow Caves (1971, 1996) train of thought, arguing that internalisation is a paradigm rather than a theory, as the types of market failure which determine different types of FDI are likely to vary.

According to Dunning (1993a: 38), internalisation theory is "the most significant contribution by micro-economists to our understanding of the MNE". However, he argues that the theory has made a greater impact in terms of providing insights into multi-activity firms, rather than MNEs per se and that the theory treats many of the "more interesting influences" as exogenous variables. As a result, many of the aspects of market failure which are "uniquely cross-border" have received less attention than those which are not Dunning (1993a: 38). Buckley (1987) and Casson (1987), both proponents of the theory, have called for the integration of location-specific variables with internalisation variables as a means of addressing the theory's failure to explain specifically why firms invest beyond their national borders. However, it could be argued that this is an issue taken up by Dunning in his eclectic paradigm, which incorporates

the firm-specific advantages and internationalisation advantages of internationalisation theory with the concept of location advantages.

### **2.1.2 International Competition Approaches**

One of the first major theories in this area was Knickerbocker's Oligopolistic Reaction or 'Follow the Leader' Theory Knickerbocker (1973:1). Knickerbocker's hypothesis was that:

“Firms have become international and more international still because of a type of conduct called oligopolistic reaction: an interactive type of corporate behaviour by which rival firms in an industry composed of a few large firms counter one another's moves by making similar moves themselves.”

Essentially, Knickerbocker (1973: 53) views the emerging pattern of FDI in the 1960s as a global economic chessboard, in which “product-pioneering oligopolists” specifically from the USA, sought to check each other's overseas investments. This strategy would result in form of stalemate which would maintain the pre-investment *status quo* in terms of market share and equilibrium.

The basis of Knickerbocker's hypothesis is that the greater the degree of industrial concentration in a particular industry, the greater the inter-dependence of firm behaviour. He found that, except at very high levels, where the stability of the oligopolistic structure prevented the overcrowding of host markets by MNEs, US MNEs would shadow each other's investments to counter advantages gained by the lead firm's EDT strategy in a particular country. thus maintaining oligopolistic equilibrium.

This hypothesis had previously been examined in a domestic context by Scherer (1967, 1969) who found that innovation and industrial concentration were positively correlated in the US and that US domestic investment was characterised by higher degrees of 'bunching' in more concentrated industries.

Knickerbocker (1973) accepts the limitations of the theory in terms of its restricted validity in highly concentrated industries. The study deliberately excludes countries in which a valid measure of oligopolistic reaction could not be constructed, as the number of subsidiaries by industry was considered too small. Also, if the full burden of the lead firm's EDT (e.g. a 20 per cent loss of market share) is borne by its only rival, this represents a significant loss of market share. Had this loss been spread over, for example 10 rival firms (i.e. at a loss of only 2% each), it may not have been sufficient to provoke this type of 'copycat' FDI.

It may also be the case that such a 'bunching' of FDI results in levels of production which the host market cannot absorb, or in increased costs as demand increases for scarce factor inputs. In such cases, FDI may actually result in losses for all concerned.

Knickerbocker (1973) distinguishes between aggressive investments (the first subsidiary established by a firm in a particular industry in a particular country) and defensive investments (subsequent investments in the same industry and country). The model focuses on defensive investments and in so doing raises the question of whether they occur for the same reasons or whether defensive investments are a reaction to

aggressive investments or vice versa. The theory also fails to address the issue of why defensive investment is more prevalent in some industries and countries than others.

Another variation on this theme is the hypothesis put forward by Erramilli and Rao (1990) who argue that, in service industries in particular, MNEs act as 'camp followers', shadowing the FDI movements of their key clients in order to maintain links. According to Dunning (1993a, 1993c) this previously involved simply setting up close to client subsidiaries, but, with the increasing globalisation of key client operations, there is increasing pressure on service providers to offer a truly global service. FDI allows service-oriented companies to maintain or replicate their client base in foreign countries, but also acts as a springboard from which a wider client base can be developed amongst local companies.

Investment shadowing has also been re-examined recently by Liu (1997). He argues that the presence of MNEs in a particular country has a signalling effect on firms outside that country (and with less knowledge of the country) and that this has a growth pole or magnetic effect Krugman (1991); Krugman and Venables, (1994). Firms benefit from the resultant geographical and industrial clustering through positive externalities such as the provision of upstream and downstream linkages, support services and infrastructure.

Previous studies by Wheeler and Mody (1992) and Braunerhjelm and Svensson (1996) found a positive and statistically significant correlation between these types of agglomeration or spillover benefits and FDI. This view is also supported by Maskell



(1996) and Rees and McLean (1997).

### **2.1.3 Macroeconomic Developmental Models**

#### **4.2.2.1 The Product Cycle Model**

The Product Cycle Model has been put forward as an explanation of both trade, Posner (1961); Hufbauer (1966) and FDI, Vernon (1966); Hirsch, (1967). According to Vernon's (1966) original 'FDI version' of the model, FDI is a means by which firms in high income economies, characterised by high levels of technology and innovation, can continue to make optimal use of the market potential of their products after the product technology becomes standardised.

Vernon argues that firms in countries with high per capita incomes are the major sources of technological innovation. Higher per capita income increases demand for high quality goods, while higher wage structures provide an incentive for greater innovation. Technological innovations allow firms to enjoy a temporary monopolistic position, which in turn allows firms to benefit from economic rent.

Close co-operation between the research and development and the production arms of the company are vital during the 'innovation stage' of the product. One of the key assumptions of the model therefore is that, during this stage, production is carried out in the home country and is directed at home country markets.

Over time, as the product matures, competitors emerge in the domestic market and the

innovator begins to export the product to other high income countries. The product reaches a 'mass production stage' as increased demand and competition lead to product standardisation.

This product standardisation, according to the model, leads the innovator to relocate production to LDCs to reduce costs and maintain market leadership. This happens at the point in time when:

$$MCP_x + TC > ACFP \quad (4.1)$$

Where  $MCP_x$  represents the marginal cost of production for export, TC represents transport costs and ACFP the average cost of foreign production. Buckley and Casson (1981) extended this by introducing an immediate once-and-for-all start-up cost (SC) and a recurrent fixed cost, independent of output, to account for indivisibilities in factor inputs (FC). This can be represented thus:

$$MCP_x + TC > ACFP + SC + FC \quad (4.2)$$

By engaging in FDI, Vernon argues, the innovator is able to reduce the cost of production by relocating production to countries with a comparative advantage in factor endowments (particularly cheap labour) or to gain access to markets which are subject to prohibitive import tariffs. In this way, the innovator is able to maintain a comparative advantage over competitors and ensure optimal exploitation of the innovation

throughout the entire product cycle.

Vernon's Product Cycle Model provided a reasonable explanation of American FDI activity during the 1950s and 1960s. Gruber et al (1967), for example, found a positive correlation between the research and development intensity of US firms and their propensity to innovate, export performance and FDI and the local production to export ratio. This offered at least some implicit support for the theory.

However, the explanatory powers of the theory have diminished over time. A new economic order has been established in FDI as American dominance, both in FDI and in innovation in the 1950s and 1960s, has given way to technological competition between the USA, Japan and Europe. The LDCs, which Vernon's theory assumes to be the natural outlet for outward FDI from the high per capita income developed countries, have also experienced increasing levels of outward FDI since the 1960s.

In the light of these developments, Vernon has expanded the theory to include other factor costs and to take account of FDI from developed countries outside the USA (see e.g. Vernon, 1971, 1974), while Hirsch (1976) has relaxed the rigid sequence of the product cycle as a means of increasing its generalisability, as well as seeking to distinguish between LDCs and developed countries with regard to the conditions determining the choice between FDI and exports Agmon and Hirsch (1979).

However, Vernon has himself recognised the limitations of his theory Vernon (1979). It

is very much restricted to industries characterised by high levels of innovation Solomon (1978) and tends to oversimplify the strategic decision-making process Buckley and Casson (1976), although this latter criticism is perhaps unfair, as Vernon himself stated the model was intended to provide a simplistic explanation of a complex phenomenon (Vernon, 1971).

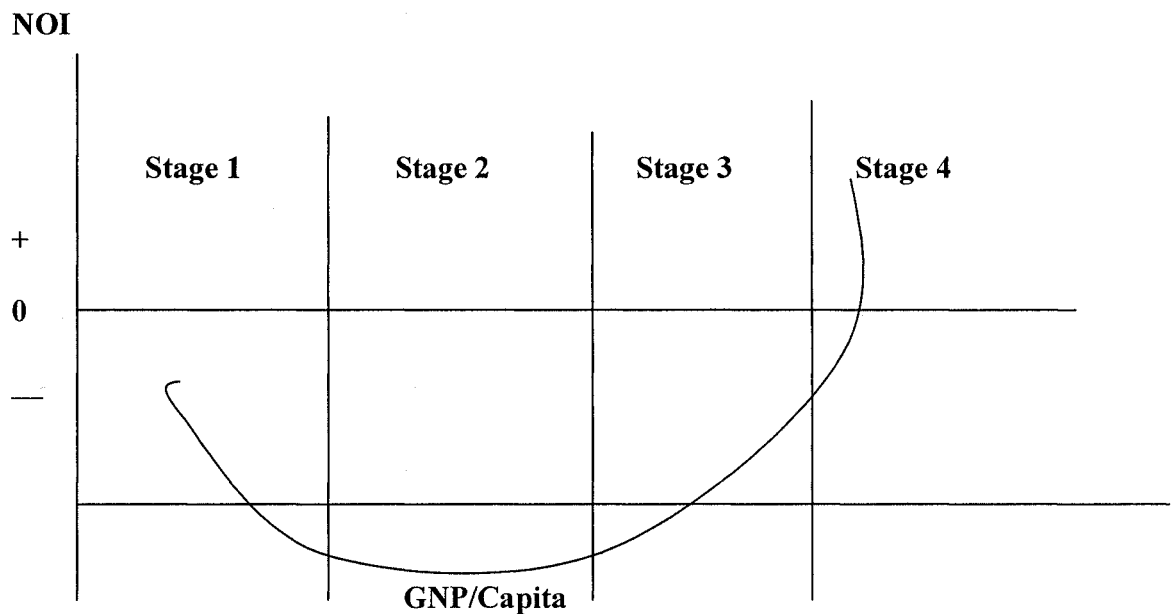
Internationalisation theories of the type proposed by Johanson and Wiedersheim-Paul (1975) and Johanson and Vahlne (1977, 1990) follow a similar pattern to Vernon's theory, although this type of model is based more on growing market commitment than on the product cycle per Se. In the internationalisation process model, firms initially produce for the domestic market, then begin to export, set up a sales subsidiary and finally produce and manufacture in the host country. Similarly, Streeten (1993) has suggested that, in terms of the Product Cycle Model, exporting has become a form of reconnaissance in a longer term process of FDI decision-making. This hypothesis is supported by Thomsen and Woolcock (1993). Using data on flows from the USA to the EC, they argue that exporting is becoming a 'second-best' option. Grosse and Trevino (1996) also found evidence from FDI in the USA to support the notion that FDI is used to preserve markets established by exporting. They also argue, however, that FDI and trade complement each other in terms of serving foreign markets.

#### **2.1.3.1 Dunning's Developmental Model**

This model was essentially developed to test aspects of the more microeconomic Eclectic Paradigm at a macroeconomic level, as well as to investigate the dynamics of

FDI. Dunning (1981a) uses the model to provide a pattern of Net Outward Investment (NOI) as a function of GNP per capita.

**Figure 2: Dunning's Development J-Curve (2).**



The basis of the model is a J-curve on which Dunning has identified four stages of development based on GNP per capita. Dunning's analysis, based on LDC statistics for 1971, identifies four stages of development. The first stage refers to countries at the earliest stage of economic development in terms of GNP per capita and NOI. These countries do not have any indigenous firms with ownership advantages significant enough to generate outward investment, nor are they attractive host-countries for inward FDI. Net outward investment is therefore zero. Countries in the second stage of development are those LDCs which have 'graduated' from the first stage and which are now attractive host-countries for FDI activity. However, their economies have not

advanced to a level where indigenous firms have developed ownership advantages with which to engage in FDI themselves. NOI is therefore negative. Countries in the third stage of development have some firms within their economies which are capable of generating ownership advantages and they are therefore able to engage in a limited degree of outward investment (FDI). At the same time, however, they are still attractive locations for inward FDI in sectors in which indigenous firms are relatively disadvantaged and in which strong locational advantages exist. Therefore, while NOI is improving, inward investment still outweighs outward investment. As a result, NOI remains negative. In the fourth stage of development, NOI is positive. This should not, however, imply that these countries are lacking in terms of locational advantages. On the contrary, the statistical evidence used by Dunning indicates that inward investment per capita rises as income per capita increases. These countries simply have high volumes of both inward and outward investment, with the former are outweighed by the latter. Beyond the fourth stage, as both inward and outward FDI increase at different levels over time, NOI will tend to fall towards, and then fluctuate around, zero.

It is worth noting that, in terms of income, there is an overlap between countries in the third and fourth stages. It was found that resource-based countries, such as Canada or New Zealand, have consistently higher rates of Net Investment Flow (and therefore negative NOI) than industrial nations such as Japan.

The restrictions of the model have, however, been criticised. Gray (1982), for example, argues that the model does not account for intra-group FDI, which constitutes a

substantial share of FDI flows. This is particularly important when one considers the high proportion of investment flows between the industrialised countries in industries which, for statistical purposes, are the same. Gray argues that this type of FDI, among countries with similar cost structures and factor endowments, is due to ownership advantages: on the demand side for differentiated products and on the supply side for related products Gray (1980). Therefore, in terms of accounting for intra-group FDI, it can be argued that locational advantages (or disadvantages) are so small that trade barriers (e.g. tariffs) are more important factors.

While recognising the limitations of the theory's static analysis of a dynamic phenomenon, Dunning and Narula (1996) argue that the basic premise of the theory still holds. Using data on FDI activity and GOP for 1980 and 1992, they found a strong causal relationship between FDI and development.

#### **2.1.3.2 Theory of Comparative Advantage**

Kojima's comparative advantage theory Kojima (1973, 1975, 1977, 1985) explains FDI as a response to evolutionary changes in dynamic comparative advantage as the relative factor endowments of nations change over time. The theory identifies two different types of FDI: macroeconomic FDI and microeconomic FDI. Based on Pigovian welfare analysis, Kojima argues that macroeconomic FDI is trade creating, while microeconomic FDI is trade supplanting.

Kojima's hypothesis is limited to a typical neo-classical two factor model of national factor endowments, in which capital is mobile and labour immobile, and is based on

investment flows from developed countries to LDCs.

The theory assumes that labour costs increase over time in the developed countries as a result of pro-trade or neutral growth in both developed countries and LDCs, resulting in higher rates of capital formation in developed countries. This causes comparative advantages in the production of certain goods to shift from the developed countries to the LDCs. MNEs respond to this shift by transferring mobile capital assets, such as technology and management skills, to LDCs (the comparative advantage location) via FDI. By doing so, they not only increase the efficiency of the host-country industry, they also change the role of the industry in international trade. Global welfare is therefore enhanced by this kind of 'macroeconomic' FDI activity.

'Microeconomic' FDI, on the other hand, has the opposite effect in terms of economic welfare. Kojima argues that this type of FDI simply supplants trade as it establishes industries in host countries in which the source countries have a greater comparative advantage. As a result, MNEs transfer technology which is inappropriate to the factor endowments of the host country. This leads to little more than the creation of small enclaves of modernisation in host LDCs from which there will be a negligible trickle-down of technology.

The Comparative Advantage Theory of FDI is based on a study of Japanese FDI, found to be macroeconomic' in nature (for these purposes), and American FDI, which was found to be 'microeconomic'.

Perhaps the most obvious criticism of the theory is its rather narrow base Gray (1982).



As a result, the theory is unable to account for bi-lateral FDI between developed countries, or the use of trade barriers to induce FDI. Kojima himself Kojima (1975) concedes that FDI between developed countries or within industrial groups may be explained by alternative theories.

The Reading School's criticism is best summarised by Dunning (1988b:9-10):

“[Even as a prescriptive model, the Kojima approach is deficient in two major respects. First, since it is neoclassical in its stance, it can neither explain, nor evaluate the welfare implications of foreign direct investment prompted by the desire to benefit from the common governance of cross-border activities Second, and related to the first, Kojima largely ignores the central characteristic of MNE activity namely, the internalization of intermediate product markets; and where he does take this into account, he always seems to assume that the resulting allocation of resources is less desirable to that which would have been dictated by the market. This is because Kojima is locked in to a neoclassical paradigm that negates the very possibility of market failure. In his scenario, the MNE can *never* be the most efficient agent for transferring resources across national boundaries, simply because its very existence implies a second-best transactional situation.”

#### **4.2.3 The Eclectic Paradigm: A Framework for Analysis**

“If the internalization paradigm, modified by an appropriate theory of strategic behaviour, is the contribution of the economist to explaining the distinctive characteristics of FDI or the MNE, the eclectic paradigm as modified by the introduction of a theory of political economy is at least a good starting point to explaining all kinds of MNE activity” Dunning (1993a:46).

The Eclectic Paradigm Dunning (1977, 1981b) is, as its name suggests, a synthesis of FDI theories. Like many other explanations of FDI, it suffers from its static nature and generality. It is, however, the most common framework for the analysis of the determinants of FDI by Meyer (1998:59) and provides the basis for much of this research.

According to the eclectic paradigm in its original format, three conditions are necessary for companies to adopt strategies of FDI. Borrowing from internalisation theory, the first two conditions are that firms have ownership-specific or competitive advantages ('O' advantages) and that internalisation advantages ('I' advantages) exist which lead the firm to exploit its 'O' advantages internally. To these two conditions, Dunning added a third condition: that there must be locational advantages ('L' advantages) through which the 'O' and 'I' advantages can be created, exploited or acquired. A whole range of locational advantages exist, including barriers to trade, investment incentives, centralisation of research and development, marketing and production, input costs and transport and communication costs. According to Dunning's theory, all three conditions must exist for firms to adopt a strategy of FDI. Assuming that a time lag is required to implement the strategy, this can be presented as:

$$FP_t = (f) OLI_{t-1} \quad (4.3)$$

Where FP represents the level of the firm's foreign production, f represents the company's strategic response to OLI, which in turn represents the OLI advantages referred to above.

Dunning's Eclectic Theory provides a reasonable general overview of FDI, but, like all theories of FDI, it fails to provide an all-encompassing 'General Theory of FDI'. The insights provided by the theory are too general, making it difficult to test and severely limiting its predictive and explanatory powers.

Rugman (1981) has also questioned Dunning's argument that all three conditions must exist for firms to follow a strategy of FDI. He argues that the conditions set out in the internalisation theory provide a sufficient explanation of FDI. Similarly, Ethier (1986:803) argues that internalisation is the "Caesar of the OLI triumvirate". However according to Dunning (1998:45):

"The OLI triad of variables determining FDI and MNE activity may be likened to a three-legged stool; each leg is supportive to the other, and the stool is only functional if the three legs are evenly balanced. In so far as the third leg [internalisation] completes this balancing, it may be regarded as the most important, but there is no reason to suppose one leg performs this task better than another."

The eclectic paradigm in its original format has, like many other theories of FDI, also been criticised for lacking dynamism. Dunning himself states that:

"Any particular MNE one might like to consider is never likely to be in equilibrium, in the sense that it can be said to have achieved all the goals it sets itself. Similarly, at any particular moment in time, a country's competitive advantage is likely to be moving towards, or away from, its optimum position. Yet, most theories of international production which have emerged over the past 30 years have tended to offer a snapshot explanation of the level and structure of the foreign value added activities of firms, or how these have changed between two points of time, i.e. a comparison between two or more snapshot views" (Dunning, 1993a:51).

Dunning has therefore modified the eclectic paradigm Dunning (1988a, 1993a), introducing an “over time variable” Dunning (1993a:53). He argues that firms’ foreign production strategies may change in response to changes in the configuration of their OLI advantages. Alternatively, firms may adopt new strategies towards unchanged OLI advantages.

In other words, according to Dunning, international production at a future point in time ( $t+1$ ) is an accumulation of a firms’ strategic responses to previous OLI configurations and changes to these configurations caused by external changes in the investment environment and non-strategic endogenous variables. Therefore future patterns of international production are determined by the strategic and non-strategic responses of firms to current OLI configurations and actual and/or expected changes in these configurations Dunning (1993a). Dunning emphasises the distinction between strategy-led changes (firms’ responses to changes in variables beyond their control) and strategy initiating changes (strategies adapted to change firms’ OLI configurations or their strategies towards them), although the constant interaction between exogenous and endogenous variables makes this distinction difficult in practice.

**Table 4.1: Summary of Selected Studies of the Determinants of FDI.**

Study	Issue under investigation	Findings
Cleeve (2000)	Factors that determine location of Japanese FDI in the UK	Wage differences are unimportant. Production growth is important.
Resmini (2000)	Determinants of FDI by EU in the CEECs	Heterogeneity at sector level.
Gray (2000)	Effect of globalisation on developing countries	Tendency for virtuous and vicious cycles is magnified
Baumgarten and Hausman (2000)	Location of US FDI in Latin America	FDI decision is complicated, containing variables of political, market and social nature.
Pitelis (2000)	Theory of growth of MNCs	Growth results from endogenous factors, and from external opportunities and threats.
Moshirian (2001)	FDI in banking	Major determinants include bilateral trade, banks, foreign assets, cost of capital, exchange rates, and other FDI.
Sanford and Dong (2000)	Influence of tourism on FDI	Significantly positive relationship between tourism and new FDI in the USA.
Lehmann (1999)	Role of country risk	Political and economic risks are deterrents to FDI.
Traxler and Woilech (2000)	Labour market regimes as a determinant of location	Investors do not assign high priority to labour market regimes.
Schoeman et al. (2000)	Impact of fiscal policy on FDI in south Africa	FDI flows are affected by fiscal discipline and tax burden on foreign investors.
List and Co (2000)	Relationship between location and environmental regulations	Environmental policies do matter.
Cheng and Kwan (2000)	Determinants of the location of FDI in China	Important determinants are regional market size, good infrastructure and preferential policy, wage cost has a negative effect.
Thompson and Poon (2000)	Links between FDI and regulatory change in Asian countries	Significant correlation between reform expectation and FDI flows.
Sung and Lapan (2000)	FDI and exchange rate volatility	With sufficient exchange rate volatility, firms can increase profit by opening several plants.
Ihrig (2000)	Effect of repatriation restrictions on FDI.	Abolishing restrictions encourages FDI inflows.
Pistoresi (2000)	Location-specific and policy related determinants of FDI in Latin America and Asia	FDI depends on economic and political factors.
Kosteletous and Liargovas (2000)	Relationship between FDI and real exchange rate	Causality runs from the real exchange rate to FDI in large countries with floating exchange rates. Bidirectional causality in other cases.
Clegg and Scott-Green (1999)	Link between FDI and European integration	New FDI is linked to conventional host characteristics whose effects vary considerably between groups of member countries.
Kiyamaz and Taylor (2000)	Competition for FDI	When a country is not sure that a miserly offer will drive the company to its rival, it may take the chance and nevertheless make a miserly offer.
Marinov and Marinova (1999)	Motives of foreign investors, host governments and host companies in eastern Europe.	Motives are related to the strategic priorities of investing firms.

Benacek (2000)	Determinants factors of FDI inflows in the Czech Republic	Initially, foreign investors were not motivated by local human capital.
Dunning and Dilyard (1999)	Explanations of FDI and portfolio investment.	Determinants have common and distinctive characters. They are complementary.
Wilkins (1999)	Relationship between FDI and portfolio investment	FDI and portfolio investment ratios have shown no consistency across countries through time.
Zhang (2000)	Size of US FDI in China	Small size is a result of UD investors preference for market access, China's export-promotion FDI regime, bilateral relations, and political instability.
Ramcharan (1999)	Relationship between FDI and country risk.	A significant relationship exists between FDI and country risk (political and economic).
Kreinin et al. (1999)	Motives for Japanese FDI	Many motives, but securing market share is the most important
Donnenfield and Weber (2000)	Choice between FDI and exports	No simple relationship between the size of tariffs and the tendency to engage in FDI.
Wei (2000a)	The effect of taxes and corruption on FDI.	A rise in either the tax rate or corruption in the host country reduces FDI.
Okposin (1999)	FDI by Singapore-based firms.	FDI is carried out only by large firms or firms with monopolistic advantage.
Konishi et al. (1999)	FDI and trade barriers.	Firms can jump over trade restrictions
Guimaraes et al. (2000)	Agglomeration as a determinants of FDI.	Agglomeration economies are decisive location factors.
Wu (1999)	Intra-urban FDI location in China.	Intra-urban FDI location can be explained according to rational economic considerations.
Fosfuri and Motta (1999)	The argument that firms embarking on FDI must possess some advantages.	Firms might invest abroad to capture local advantages through proximity of plant location.
Globerman and Shapiro (1999)	The effect of policy changes on inward and outward FDI.	Free trade agreements had a positive effect. Screening of projects had no significant effect.
Gyapong and Karikari (1999)	Causal relationship between FDI and economic performance in two African countries.	Impact of economic performance on FDI depends on the strategy of the investment.
Tuman and Emmert (1999)	Political and economic determinants of Japanese FDI in Latin America.	Determinants include market size, economic policies and certain types of political instability.
Montiel and Reinhart (1999)	Effect of capital control on the volume and composition of capital flows.	Capital controls influence the composition of flows, but sterilized intervention influences both volume and composition.
Mody et al. (1999)	The choice of FDI location by Japanese MNCs.	Trade barriers do not drive Japanese FDI in Asia
Das (1999)	Choice of entry mode.	Riskiness of the project is a factor against joint ventures. In the absence of policy intervention, licensing is dominated by FDI or ventures.
Barrel and Pain (1999)	Determinants of location of Japanese FDI	Controlling for size and labour costs, FDI is influenced significantly by trade barriers.
Martin and Ottaviano (1999)	Locational factors	High growth rates and transaction costs are associated with FDI.
Sin and Leung (2001)	Effect of liberalization on FDI inflows.	Policy changes are more important for FDI than GDP growth rate or exchange rate.

### **4.3 Summary: Motivations for FDI**

The various theories discussed in the previous sections explain and describe the determinants of FDI. Using this theoretical basis a number of key motivations for foreign production can be derived. They basically fall into four groups Dunning (1988b, 1993b).

#### **4.3.1 Market Seeking FDI**

Companies engaging in this type of FDI may be seeking entry to a new market or trying to protect an existing stake in a particular market. Motives include:

1. Tariff and other trade barriers and various types of incentive scheme offered by host governments in particular, but also home governments
2. Market size and potential.
3. Investments by key clients and/or suppliers.
4. Familiarisation with local conditions allowing the MNE to compete on a level playing field with local producers.
5. Serving the target market from within may reduce the physical and psychic transaction costs of doing business there from a distance.
6. Replication of existing oligopolistic structure in a new market by 'following the leader'.

#### **4.3.2 Natural Resource Seeking FDI**

This is largely based on relative factor endowments. Motives for this type of FDI include:

1. Securing supply of and minimising the cost of raw resources, or supplying natural resource-related service industries.
2. Minimising costs by exporting from locations with lower real labour costs.
3. Obtaining 'invisible' assets, such as technological capability or management skills.

#### **4.3.3 Efficiency Seeking FDI**

This is essentially a rationalisation of market seeking and resource seeking FDI to allow the MNE to exploit gains, mainly from risk diversification and economies of scale and scope, from the common governance of activities spread across national borders. There are two motives:

1. Exploiting relative factor endowments to achieve a division of labour which sees R&D and capital-intensive activities in a developed capital-rich location, while labour- and resource-intensive activities are carried out in locations where these factors are in relative abundance (thus explaining FDI between developed and less developed countries).
2. Exploiting scale and scope economies. This is based more on factors such as the availability and quality of suppliers and input services and local demand patterns (and which explains FDI between developed countries).

#### **4.3.4 Strategic Asset or Capability Seeking FDI**

This may be combined with efficiency seeking FDI as firms acquire and restructure their assets to meet strategic goals. Motives include:



1. Entering into alliances with or acquiring host country operations to prevent rivals doing so, or to pool resources against a rival third company.
2. Acquiring an exclusive supply of resources, or distribution of a local rival's brand products.
3. Securing host government contracts or complementary products allowing a more diversified product range.

Statistical evidence for strategic and efficiency seeking FDI, as described above, is non-existent according to Dunning (1993b:61), although he argues that they account for a growing share of MNE activity, especially in technology- and capital-intensive FDI. Also, it is often difficult to distinguish between market seeking and resource seeking FDI. However, as Dunning (1993b:57) explains, these categories are not exclusive:

“It is worth noting that in the early 1990s many of the larger MNEs are pursuing pluralistic objectives and most engage in FDI that combines the characteristics of each of the above categories. Moreover each type of MNE activity may be aggressive in the sense that the investing company is seeking to take a pro-active action to advance its strategic objectives, or defensive in the sense that its behaviour is in reaction to actions taken (or perceived likely) by its competitors or by foreign governments which require it to protect its market position.”

He adds that, over time, the motivations for FDI of a particular MNE are liable to change as a result of the dynamic learning effects of international production.

As Dunning explains, these motivations are often difficult to test. A simpler approach, and one perhaps more appropriate for testing at the level of the firm, has been adopted by Estrin et al (1994), who tested the motivations behind a number of foreign direct

investments in Central and Eastern Europe. Using case studies as the key source of data, they divided the motivations for FDI into three groups: market size motives (including market potential), strategic motives (primarily in terms of market share and first mover advantage) and cost motives (particularly in terms of labour, but also in terms of raw and intermediate inputs). Within the framework of the OLI paradigm, these categories will be used to test the locational determinants of FDI in Libya in this study. A fourth category will also be examined: government policy. This category has been added to take account of the impact of tariff barriers, and the adoption of FDI strategies as a mean of circumventing them, as well as the offer of incentive schemes by the Libyan government to attract FDI.

## **CHAPTER FIVE**

### **FDI INFLOWS TO LIBYA: PAST, PRESENT AND FUTURE.**

#### **5.1 Introduction**

Production sectors such as manufacturing, agriculture and marine resources have been at the top of the list of priorities in the Libyan economic transformation plans over the past three decades. However, in the aftermath of the revolution and its paramount concern about the question of development and the transformation of Libyan society from poverty to a well developed and productive society, the Libyan economy has shown very fast growth since the early seventies. This concern is reflected in the huge funds allocated for the establishment of strategic projects featuring all production sectors.

The objectives of this chapter are to summarize the main feature of FDI in the world, developing countries and also analyse the trends and development of FDI inflows to the Libyan oil sector from 1962 until 2003.

#### **5.2 Types of FDI.**

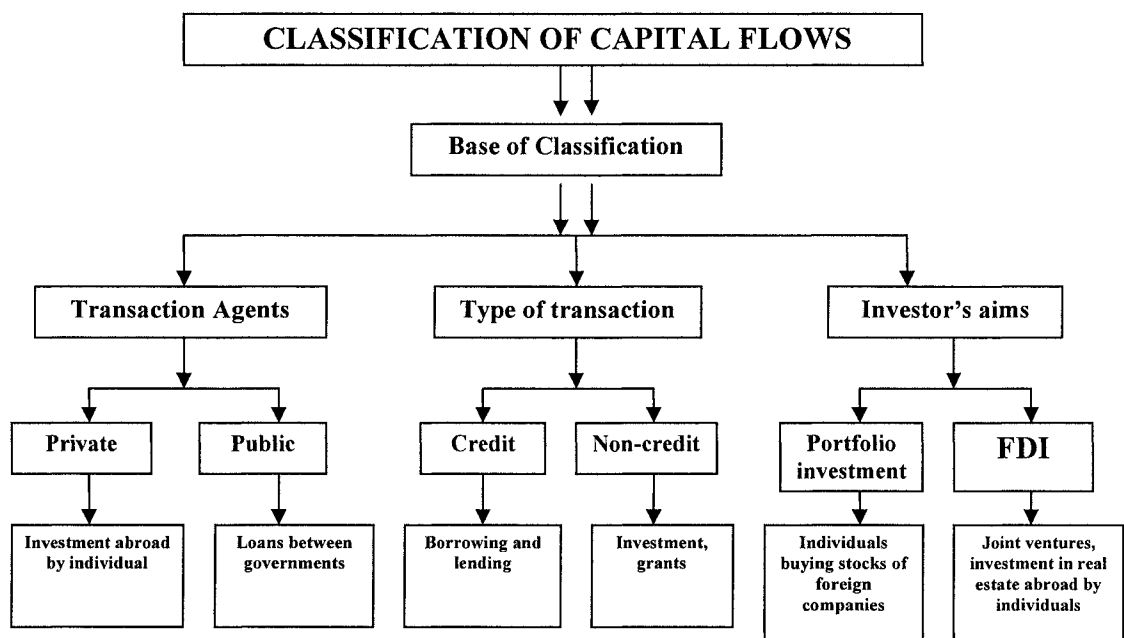
1. Natural resources investment. (Oil & Gas). As more identification of this study, the study is consider and emphasis in this particular type of FDI.
2. Infrastructure investment.
3. Market-serving investment.
4. Export-oriented investment.

### 5.3 The FDI categories in terms of capital Flows

- 1- Inward flow of FDI: growth of FDI within a country in given time period (the country receiving the business investment). This study deals with this category.
- 2- Flow of FDI: amount of FDI undertaken in a given time period (i.e. annual)
- 3- Stock of FDI: accumulated value of foreign owned assets at a given time
- 4- Outward flow of FDI: amount of FDI investments made by business entities within a home country into a host country.

Figure 5.1 shows that the subject of this study (FDI) is one of the investor's main aims. Also the figure illustrates the classification of capital flows separated into three main categories; transaction agents, type of transaction and investment aims.

**Figure 5.1: Classification of Capital Flows.**



In particular, FDI is a more stable source of financing than portfolio investment (Lipsey, 1999), and it raises the global factor productivity through technological spillovers (Borenzstein and De Gregorio, 1995)

## 5.4 The Global Significance of FDI

Foreign direct investment (FDI) has grown rapidly since the 1970s, and particularly since the mid 1980s. Between the years 1984 and 1989 the annual average world FDI inflows reached \$115 billion. Indeed it has grown faster than both international trade and world output. In 1995 FDI growth was about 39%, which was substantially higher than that of the world's exports of goods and services (18%), world output (2.4%) and gross domestic capital formation 5.3 % (World Investment Report 2004).

Table 5.1 shows FDI inflows to developed and developing countries from 1980 until 2003. In 2000 FDI inflows hit unprecedented levels, reaching a record \$1393 billion. This compares to \$204 billion in 1990, and is equivalent to an increase of 35% over the five year period.

**Table 5.1: Movement of Foreign Direct Investment Inflows in US\$ billion.**

Years	Global FDI inflows,	FDI inflows to LDCs,	% of FDI inflows to LDCs
1980-85	49.8	12.6	25
1990	204	34	17
1995	315	112	36
2000	1393	246	18
2001	824	209	25
2002	679	158	23
2003	560	172	31

Sources: World Investment Reports. 2002 & 2004.

It has been argued that due to the increasing globalisation of world economic activities, international production carried out by multinational corporations has grown more rapidly. In 1995 international production by some 40,000 parent firms and some 250,000 foreign affiliates increasingly influenced the size and nature of world transactions. The two generally accepted proxy indicators of international production, outward FDI stock and global sales of foreign affiliates, reached values of \$2.6 trillion in 1995 and \$5.2 trillion in 1992 respectively.

It is clear that the size and scope of international production is further amplified by the activities of multinational corporations (MNCs) in forms other than FDI, such as licensing, franchising, turn-key projects and subcontracting. Global sales in world markets associated with the previously mentioned operating forms associated with this broader definition of international production amounted to an estimated value of \$7 trillion in 1992, compared to some \$3 trillion in arm's length trade. In the United States, for example, four out of five dollars received in 1995 for goods and services sold abroad by MNCs were actually earned for goods and services produced by their foreign affiliates or subsidiaries in the host countries' markets in which they operated or sold to them directly. In response to globalisation, progress in the international production arena is already being made. National, regional and international agreements are paying more attention to FDI. Countries now are more committed to liberalising their regimes to attract more inward foreign investment. In 1994, about 108 out of 110 legislative changes made in 49 countries were in the direction of a more liberal FDI framework, compared to 101 out of 102 legislative changes in 57 other countries. Only 5 out of a

total of 373 FDI regulatory changes during 1991-1994 were not in the direction of greater trade liberalization and investment agreements.

### **5.5 Significance of FDI for Developing Countries**

Most of the growth in FDI to developing countries has increasingly been directed to a handful of Southeast Asia countries. These attracted over 70% of the total inflows in 1994 compared to 40% in the mid 1980s. FDI has increasingly become vital for developing countries to access capital, technology and export markets.

FDI has become an important source of private external finance for developing countries. It is different from other major types of external private capital flows in that it is motivated largely by the investors' long-term prospects for making profits in production activities that they directly control.

The Main Advantages of FDI.

- 1- Source of capital flows (foreign exchange earning)
- 2- Bring new training programmes & technologies for local people.
- 3- Create a new management techniques and transfer skills.
- 4- Provide new jobs for local people.
- 5- Bring better domestic competition and new product ranges.
- 6- Exploitation of natural resources.
- 7- Enhance national outputs.
- 8- Accelerate economic development.

The Main Disadvantages of FDI to Host Countries.

- 1- Repatriated profits and capital.
- 2- Inappropriate technology.
- 3- Drain of foreign exchanges.
- 4- Displace national oil investors.
- 5- Attract the indigenous skills from local enterprises.
- 6- Political, economic and environmental considerations.

### **5.5.1 Trends in Developing Countries**

Developing countries have, during the past decade or so, begun to liberalize their national policies to establish a hospitable regulatory framework for FDI by relaxing rules regarding market entry and foreign ownership, improving the standards of treatment accorded to foreign firms, and improving the functioning of markets. These "core" policies are important because FDI will simply not take place where it is forbidden or strongly impeded. However, changes in policies have an asymmetric effect on the location of FDI: changes in the direction of greater openness allow firms to establish themselves in a particular location, but do not guarantee that they will do so. In contrast, changes in the direction of less openness (for example, nationalization or closure to entry) will ensure a reduction in FDI.

The most important determinants for the location of FDI are economic considerations, which come into full play once an enabling FDI policy framework is in place. They may be divided into three groups (see Table 5.2): those related to the availability of location-bound resources or assets; those related to the size of markets for goods and services;



and those related to cost advantages in production. Although many of the factors that attract investment to particular locations—such as abundant natural resources; large host country markets; or low-cost, flexible labour remain important, their relative importance is changing as transnational corporations increasingly pursue new strategies to enhance their competitiveness within the context of a globalizing and liberalizing world economy.

Trade liberalization and FDI and technology flows, combined with deregulation and privatization, have not only improved firms' access to markets for goods and services and to immobile factors of production but also increased competitive pressures in previously protected markets, forcing firms to seek new markets, resources, and assets abroad. At the same time, technological advances have enhanced firms' ability to coordinate international production networks.

Given the potential role FDI can play in accelerating growth and economic transformation, developing countries are strongly interested in attracting FDI. They are taking steps to improve the principal determinants influencing the locational choices of foreign direct investors (Table 5.2).



infrastructure, marketing networks, technology, and innovative capacity, and these are critical for enabling firms to maintain their competitiveness in a rapidly changing world. The rising importance of such assets is probably the single most important shift that has occurred among the economic determinants of FDI in a liberalizing and globalizing world economy. The new configuration also pays more attention to "agglomeration" economies arising from the clustering of economic activity, availability of infrastructure facilities, access to regional markets, and competitive pricing of relevant resources and facilities.

The challenge for developing countries is to develop a well-calibrated and, preferably, unique combination of factors determining FDI location and to match those determinants with corporations' strategies. Policies intended to strengthen national innovation systems and encourage the spread of technology are central because they underpin the ability to create assets.

The main flows of FDI is among the developed countries. Indeed, OECD countries have probably been the most potential group in undertaking FDI by carrying out about 95% of the total outward FDI while, on average, 75% of world FDI was directed into OECD countries (UNCTAD, 2002).

## 5.6 Barriers to FDI

International trade in services has been increasing significantly in recent decades and now is equal to about 20% of global merchandise trade. Similarly, there has been an increasing amount of FDI inflows in and between advanced and developing countries. FDI is subject to a variety of barriers as well and thus merits attention in its own right. It is obviously important to consider the barriers that affect FDI and issues of measurement of these barriers.

**Table 5.3: Barriers to FDI.**

<b>Restrictions on Market Entry.</b>	<ul style="list-style-type: none"> <li>1-Bans on foreign investment in certain sectors</li> <li>2-Quantitative restrictions (e.g., limit of 25% foreign ownership in a sector)</li> <li>3-Screening and approval (sometimes involving national interest or net economic benefits tests)</li> <li>4-Restrictions on the legal form of the foreign entity</li> <li>5-Minimum capital requirements</li> <li>6-Conditions on subsequent investment</li> <li>7-Conditions on location</li> <li>8-Admission taxes</li> </ul>
<b>Ownership and Control Restrictions.</b>	<ul style="list-style-type: none"> <li>1-Compulsory joint ventures with domestic investors</li> <li>2-Limits on the number of foreign board members</li> <li>3-Government appointed board members</li> <li>4-Government approval required for certain decisions</li> <li>5-Restrictions on foreign shareholders' rights</li> <li>6-Mandatory transfer of some ownership to locals within a specified time (e.g., 15 years)</li> </ul>
<b>Operational Restrictions.</b>	<ul style="list-style-type: none"> <li>1-Performance requirements (e.g., export requirements)</li> <li>2-Local content restrictions</li> <li>3-Restrictions on imports of labour, capital and raw materials</li> <li>4-Operational permits or licences</li> <li>5-Ceilings on royalties</li> <li>6-Restrictions on repatriation of capital and profits</li> </ul>

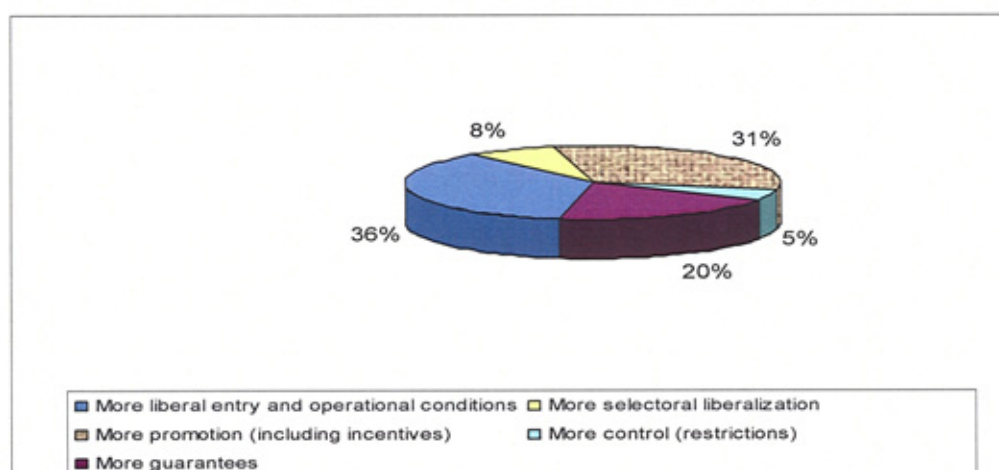
Source: UNCTAD, 1996.

The main types of FDI barriers that have been identified by UNCTAD (1996) are noted in Table 5.3 Further information on the barriers most commonly used to restrict FDI is provided in Hardin and Holmes (1997, esp. pp. 37-40 and 45-55).

Barriers to foreign direct investment (FDI) are assumed to take the form of an increased fixed cost of locating investment in a host country. FDI assumed to respond to trade liberalization or other exogenous changes that generate international capital flows in response to changes in rates of return (Martin and Yagashima (1993).

### **5.7 Changes in National Regulations to Attract FDI Inflows**

After record number of favourable changes in national FDI legislation in 2001, 2002 saw another record of 248 changes in legislation of which 236 were favourable to FDI as shown in Table 5.4, with a third related to promotional measures (see figure 5.2). These policy developments have helped sustain FDI flows to developing countries during the recession. Looking at the period 1991-2002, 1,551 (95%) out of the 1,641 changes introduced by 165 countries in their FDI laws were in the direction of greater liberalization.

**Figure 5.2: Types of changes in FDI laws and regulations, 2002a.**

Source: UNCTAD, based on national sources. a Based on 248 changes.

**Table 5.4: Changes in national regulations of FDI, 1991-2002.**

Years	Number of countries that introduced changes in their investment regimes	Number of regulatory changes of which:	More favourable to FDI*	Less favourable to FDI**
1991	35	82	80	2
1992	43	79	79	-
1993	57	102	101	1
1994	49	110	108	2
1995	64	112	106	6
1996	65	114	98	16
1997	76	151	135	16
1998	60	145	136	9
1999	63	140	131	9
2000	69	150	147	3
2001	71	208	194	14
2002	70	248	236	12

Source: UNCTAD, 2003 based on national sources.

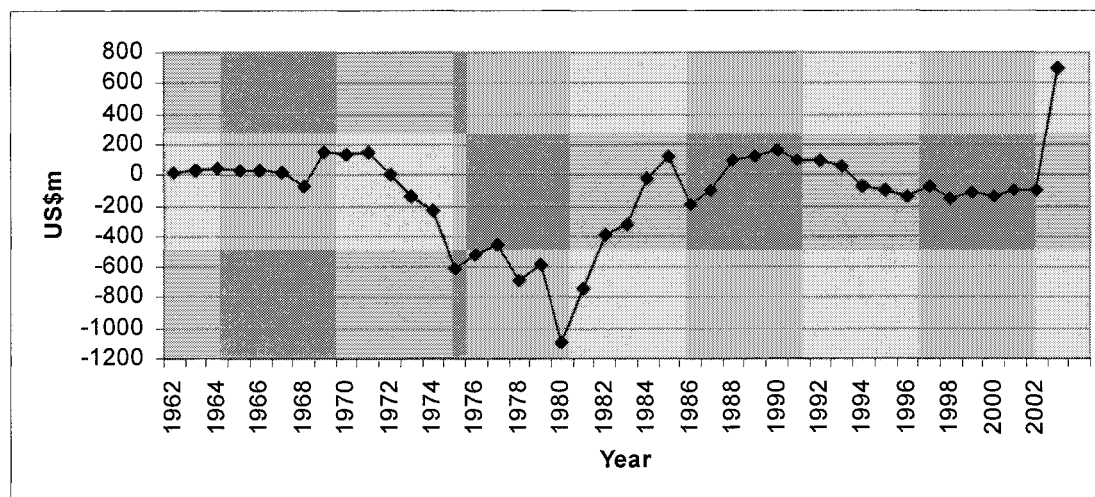
\* = Including liberalizing changes or changes aimed at strengthening market functioning, as well as increased incentives.

\*\* = Including changes aimed at increasing control as well as reducing incentives.

## 2.1 Historical FDI inflows to the Libyan oil sector

Figure 5.3 shows the FDI inflows to the Libyan oil sector from 1962 until 2003. However, during the 1970s, FDI inflows sharply dropped to the lowest level in the study period. In the 1980s it increased gradually until 1986 and then dropped after the USA attacked Libya. In the 1990s FDI inflows to the Libyan oil sector have been steadily increasing, though lower than the level of FDI inflow in the 1980s. The USA in 1982 and the UN in 1992 imposed sanctions on Libya. These sanctions adversely affected the foreign investment movements of foreign oil companies (FOCs) and the Libyan oil industry in particular over the last three decades. After the sanctions were lifted in 1999, many FOCs have entered the country. FDI inflows had increased at the first time in the Libyan FDI history to \$700 million by 2003.

**Figure 5.3: FDI Inflows to the Libyan Oil Sector.**

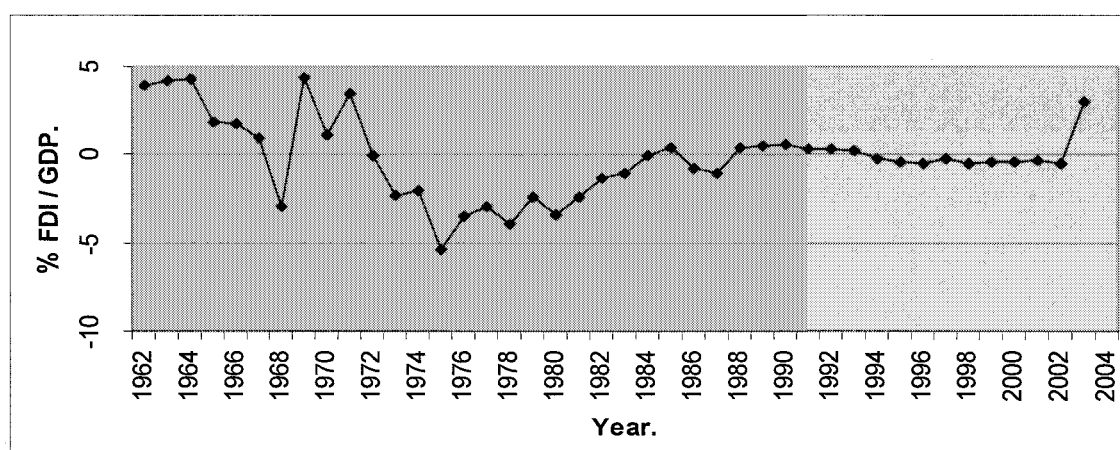


Sources: IMF, International Financial Statistics Yearbook 1981 & 2004.  
UNCTAD, World Investment reports 1992 & 2004.

The main question raised here is: which factors drive FDI inflows to the Libyan oil sector?. This initial question generates further questions, and especially the importance of FDI to the Libyan oil sector in general the most influential factors that are conducive to foreign inward investment must also be considered.

Figure 5.4 shows that in most of the study period the percentages of FDI to GDP were less than zero. This is further evidence that the contribution of FDI inflows to the Libyan economy were very poor during the study period. In 2003, the share of FDI inflows level suddenly increased relative to Libyan GDP.

**Figure 5.4: FDI inflows as percentage of Libyan GDP.**



Sources: IMF, International Financial Statistics Yearbook 1981 & 2004. UNCTAD, World Investment reports 1992 & 2004.

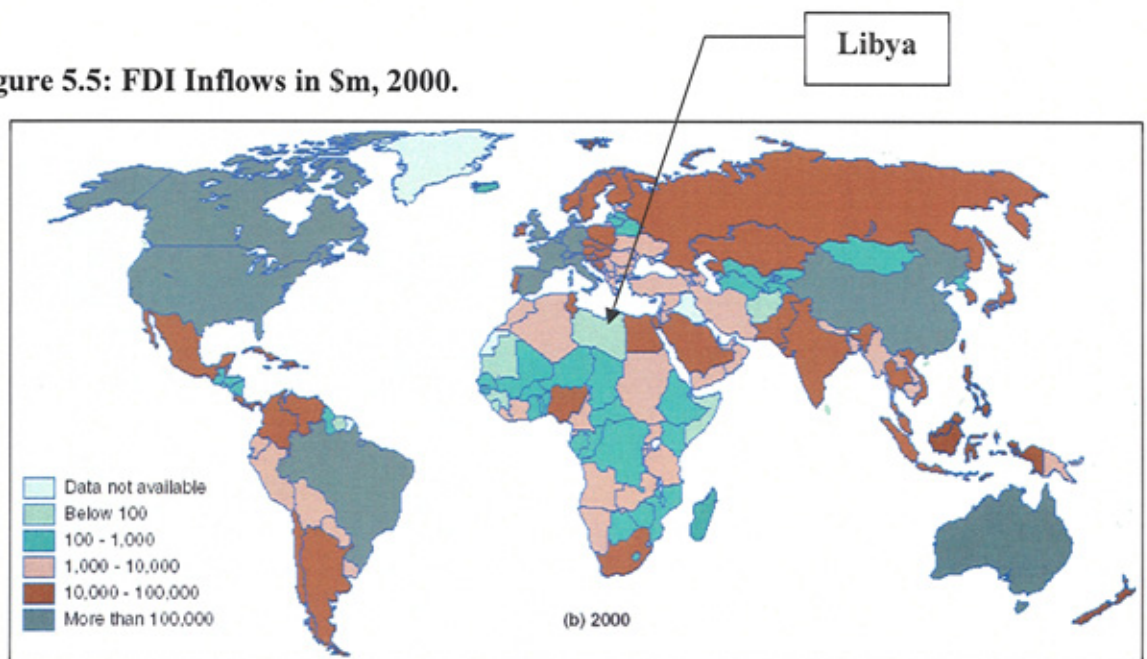
As for the sectoral distributions of FDI, the oil and gas sector attracted the lion's share due to the fact that most foreign investment was concentrated in the heavy petrochemical industry, which accounted for the majority share of total foreign investment inflows to the Libyan economy as a whole.



In recent years the Libyan government has been trying to increase the level of inward investment from overseas. This is considered a necessary condition in order to benefit from the consequent transfers of technology and capital flows, to increase the labour skills of the Libyan workforce, to create more jobs and to increase the country's exports. Inward investment is also targeted as a major means to improve indigenous management performance. The main aim of this key policy is to achieve a higher and sustainable growth rate and to perform better in relation to the faster developing countries of the world's emerging economies.

Figure 5.5 illustrates that the world distribution of FDI inflows in 2000. Developed countries such as US, Canada, China, Australia, EU, and Brazil have received more FDI inflows than the developing countries, followed by Russia, India, East Europe, Egypt, Tunisia, Saudi Arabia, and Mexico. Libya is situated amongst the countries which received less than \$100 million.

**Figure 5.5: FDI Inflows in \$m, 2000.**



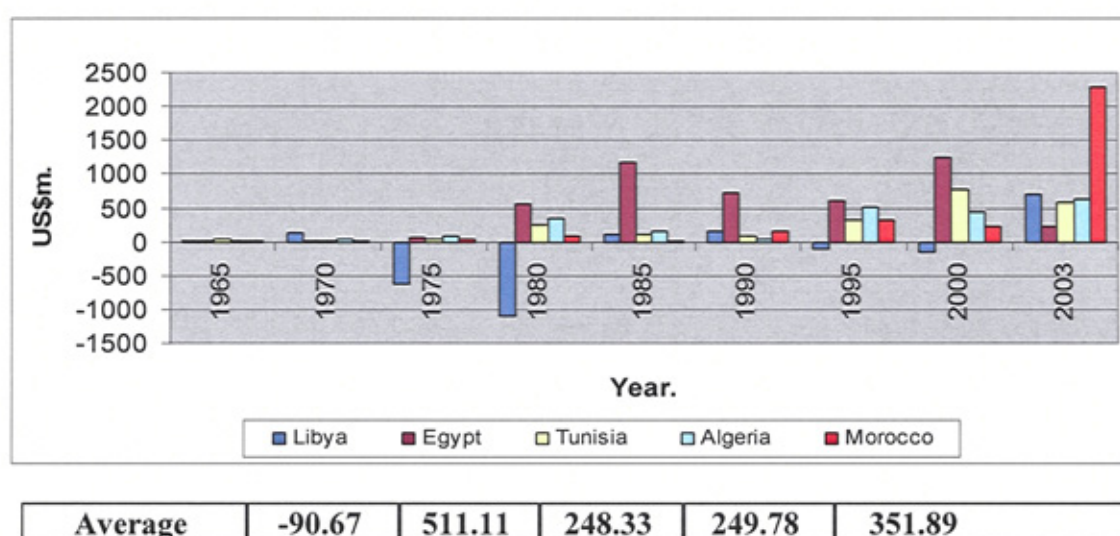
Source: (Shenkar and Yadong, 2003)

In general, more FDI inflows go to developed countries with the following features:

1. Bigger market sizes.
2. Better infrastructures.
3. Flexible and clear investment regulations.
4. Rule of law and low levels of corruption.
5. Economic stability.
6. Political and social stability.
7. Higher transparency level.
8. Unambiguous insurance regime.
9. More safety and security places.

Figure 5.6 shows the FDI inflows to the North African Countries from 1965 until 2003. Libya received lower FDI inflows compared with the other North Africa Countries. The US\$ 90.67 average million deficit meant that half of the period was represented by being negative inflows, which were the lowest among the North African countries.

**Figure 5.6: FDI inflows to the North Africa Countries, US\$m.**



Source: IMF, Yearbook 2003.

## **5.9 The Importance of FDI inflows to Libya**

FDI inflows to the Libyan oil sector offer several important benefits to the economy. First and foremost is access to develop the Libyan hydrocarbon market. Improving and upgrading the country's oil infrastructure including exploration, drilling, production, refineries and export activities. According to the most recent figures, Libyan oil exports were approximately 1.16 million barrels per day (bpd). Its proven oil reserves are believed to be 45 billion barrels, ranking Libyan reserves ninth in the world. Revenue from oil sales account for 98% of Libya's export earnings, or nearly 13.57 billion dollars in 2003. The U.S. Department of Energy forecasts Libyan exports doubling within the next five years. Libyan crude is highly sought after because of its high specific gravity and low sulphur content. This makes Libyan sweet crude especially lucrative in the production of "larger quantities of high-in-demand light fuels". Libyan sweet crude is appealing for a several reasons: it's plentiful, cheap to refine, and would likely take significantly less time to reach American markets compared to oil originating in the Arab Gulf. Furthermore, Libyan crude is valued for its relative closeness to European consumers, which currently receive about 95 percent of all Libyan exports. Significantly for Libya, much of the energy infrastructure is based on U.S. technology resulting from the prevalence of American firms during the country's oil discovery and initial extraction. As a result, the Libyan market "cannot modernize without the assistance of big U.S. oil companies.

There are many other advantages and reasons for foreign oil investors to invest in the Libyan market. First, as mentioned above, the quality of Libyan oil is regarded as one

of the best in the market place, with low production and transportation costs. Second, the availability of significant proven oil reserves. Third, there are many commercial seaports and international airports as well as a massive network of paved roads. Fourth, there is a cheap skilled labour force. Fifth, new government policies (investment laws No.5 and 7) have been developed to encourage and attract FDI into Libya. Sixth, the recent moves by the Libyan government to generate greater cooperation with the world community and the lifting of sanctions.

Because of the positive effects of FDI, there is world-wide competition to attract FDI. FDI is determined by the existence of internal and external factors. On the internal side, FDI together with international trade in goods and services promotes economic growth, jobs and raises living standards. In its report concerning the economy of ASEAN countries, the World Bank (1996) concluded that critical factors which led to progress had been the encouragement of investment, domestic saving and foreign direct investment, which resulted in rapid capital accumulation.

The importance of FDI also comes from its effects on host countries. It offers many advantages that other capital inflows cannot for example, it is a safer way of financing than through debt, and FDI often represents the easiest and most efficient way to gain access to advanced technologies, that encourage job creation, labour skills and export markets.

There are a number of important reasons as FDI is an important vehicle in the direct and indirect transfer of technology, i.e. scientific processes, and organisational,

managerial and marketing skills. There could also be secondary benefits through the diffusion of technology to Libyan local firms. This diffusion may be deliberate, such as when technology is licensed by the affiliate to domestic firms, or it could also be in the form of technological "spill-overs", which occurs when the activities of FOCs yield benefits for local economic agents beyond those intended by the multinational.

FDI may also produce other unintended efficiency enhancing effects. For example, since developing countries need to be integrated into global production, foreign direct investment will continue to cover investment gaps and ensure associated inward flows of technology.

FDI may also lead to an increase in local expenditure on research and development (R&D) to adapt global technology to local needs which, combined with training, should result in an overall improvement in productivity and trade competitiveness. These internal effects could be translated into some positive externalities for Libyan labour, such as raising income levels, presenting products with high quality and low price, increase output, or provide more jobs.

On the external side, FDI could play a crucial role in the Libyan economy. FDI can encourage Libyan exports via its multiplier effects on the domestic market and in turn the export sector. The reduction in trade costs and the enhancement of competition could make the Libyan economy more efficient, increase the demand for goods and services, and provide Libya with greater opportunities to exploit its geographical and other

commercial advantages. These external effect will be reflected positively on the Libyan balance of payment, and the exchange rate.

According to the new government strategic plan for diversifying national income, FDI could also create a national income that is less reliant as the oil sector.

### **5.9.1 Advantages to invest in Libya**

1. Strategic geographical location, as bridge between Europe and Africa.
2. Favourable Mediterranean climate.
3. Huge proven natural resources (oil & gas)
4. Very high quality of the country's sweet crude oil
5. Nearest power supply proximity to Europe.
6. Lower extraction and refine costs.
7. Cheap national and foreign emigrant labour.
8. Libya still new land, more than 3/4th of the Libyan land is undiscovered yet.
9. Huge area of land with very long sea coastline.
10. Availability of many international seaports, air ports and tow mean international boarder gates.
11. Libyan is one of the most peaceful places in the world in terms of doing business and investment, according to (Terrorism Risk 2004).
12. Both the US and UN sanctions were lifted in 1999.
13. New government regulation and laws created a new environment for attracting FDI inflows. In May 2002, the government invited foreigners to invest directly in the country as part of an effort to reduce the government's dominant role in production

and services. Moreover, the government is taking positive steps to improve Libya's position on the world stage. The country has opened up to the outside world, providing many opportunities for involvement in a country that has unexploited potential in many sectors.

However, the experience of the developing world suggests that it is far from certain whether FDI will indeed act as an engine of transition in Libya. Libya places great stress on foreign capital in the oil sector as a critical element of economic growth. Nevertheless, in spite of efforts to attract foreign oil investors, the Libyan share of world investment inflow is still very low (UNCTAD, 2000).

### **5.10 Prospective Oil and Gas Sector**

A symposium held by the Energy Sector in 1999 in Geneva, Switzerland indicated the importance of investment opportunities in this sector. The Secretary of the General People's Committee for Energy had emphasised the prodigious potential of various sedimentary basins, pointing out that only 25% of explored areas had been contracted to foreign companies.

A general master plan for exploration in Libya has been scheduled for current production as well as for what has been produced during the past four decades. This will be realised by concentrating exploratory efforts during the next decade to surveying more than 126 thousand kilometres of two dimensional seismic paths, and more than 47 thousand square kilometres of three dimensional seismic surveys. In this respect, a map

indicating the open areas at the various sedimentary basins has been prepared. This map includes new areas as well as other areas recently relinquished by certain foreign and national companies. Such areas will be available for new exploration rounds.

The NOC plan for the next decade includes investment of about \$6345 million, aimed at realising of important oil discoveries which previous studies have confirmed. There include the oil discoveries in the Ghadames basin at the NC151, NC100 and NC7A locations, and the oil discoveries located at NC101 in the Murzuk basin. The reserves of such discoveries are estimated to exceed 150 million barrels of oil, and the investment required is around \$650 million.

In the field of natural gas exploration and production, all contractual arrangements have recently been concluded for the purpose of gas development and discovery in onshore and offshore regions in western Libya. This includes constructing the transportation and exporting system to connect the Libyan coast with Southern Italy where the gas is to be transported and distributed throughout Europe using the available networks. This vital project has opened new horizons to encourage foreign investors in the field of developing gas fields and exploring new prospects. It is believed that the basins of Libya are rich in gas in areas such as the Northern regions of Sirt, the Ghadames basin, various offshore regions, and the Batnan basin and Kufra basin.

In the field of the refining, a broad base has been established in Libya. The compound refining capacity has reached 380 thousand barrels per day in five refineries scattered throughout various regions of Libya.



An economic and technical study has been completed for the construction of a refinery with a refining capacity of 20,000 barrels per day at the city of Sèbha, in Southern Libya. This will cater for all areas consuming oil derivatives in the South, in addition to feeding a power generating plant with the necessary fuel. The investment cost of this is expected to be within the region of \$258 million.

### **5.11 The Industrial and Minerals Sectors**

The export and discovery of natural resources and minerals has been of great concern in the country since the beginning of the revolution in September 1969. Exploration has led to discoveries of minerals other than oil and gas, and there are useful in the fields of steel, cement, ceramics and glass. Signs of the existence of other minerals are as following:

- 1- Limestone and dolomite are widespread throughout the country and already supply the existing cement factories, and there are also plans to establish new cement factories.
- 2- Clay is available in the Northwest and South of the country and can be used for many different needs. Reserves of clay stand at 130 million tones.
- 3- Silica is one of the most plentiful raw materials in Libya. It can be used in the manufacture of glass and construction materials, and available reserves exceed 800 million tons.
- 4- Few studies have been conducted for the use in jebas manufacturing and there is a huge reserve especially in the west of the country estimated around 380 million tons.
- 5- Salinas which can be found in different places in the country such as

- Abucamesh and Marade harbour, and the estimated reserve in the million of verity of salts.
- 6- Granite is available in Alawunate in the south east of the country with reserves of several millions of tons.
  - 7- Studies which have been completed in the Wady Al Shatie area show that iron reserves exceed 3000 million tons.
  - 8- Studies in the South East of the country also show the presence of gold, zinc and silver.

### **5.12 Libyan Foreign Investment Legislations**

In this context, legislation provides an important background for an open strategy for future amendments and improvements. Law No.5 of 1997 (see Appendix 3) and Law No.7 of 2003 (see Appendix 4) regarding foreign capital in Libya offers wide authority to a central administrative board directed by a number of highly responsible public persons in addition to qualified experts and consultations. The board's task is to administer, supervise and facilitate procedures for foreign investment projects and to offer continuous assistance and support to investors within the rights and obligations offered by the Laws.

In addition, Law No. 5 offers a number of incentives related to the importation and exportation of capital goods, equipment and materials required for investment projects. It decides on questions related to the long-term leasing of land and property ownership. The Law also offers exemptions, for suitable periods from profit and income taxes as

well as registration fees and similar dues. All restrictions imposed on transfers of net returns have been relaxed, and the transfer of capital is permitted in the event of project termination or liquidation.

Moreover, Law No. 5 of 1997 guarantees investments against nationalization, confiscation or freezing orders. Should exceptional measure of similar effects be enforced by Law or Court judgement, investors will have the right to immediate and fair compensation.

Moreover, the Law also confirms the normal principle of international arbitration in case of conflicts throughout the investment project mandate (see Appendix No.3).

The incentives are likely to encourage foreign investment are highlighted below. These incentives can be summarised as: seeking markets, seeking the assets and the economic resources to support investment projects; and seeking production efficiency. Each of these incentives incorporates a number of elements that must be considered by the foreign investor in terms of their impact on the likely success of the investment project. These elements can be detailed as follows:

First: Seeking Suitable Markets:

- 1- The size of the market, its capacity and the per capita income.
- 2- The rate and volume of growth of the market.
- 3- Capability to invade international and regional markets.
- 4- The nature of consumer choice.
- 5- The composition of the local market.

Second: Seeking Suitable Economic Resources:

- 1- The availability of raw materials, which will assist in establishing investment projects, including the extraction and use of these materials.
- 2- The availability of cheap untrained labour.
- 3- The availability of skilled labour.
- 4- The extent of technological advancement and the associated institutions at the individual, cooperative and organisational levels.
- 5- The availability of suitable infrastructure such as roads, seaports, airports, power sources, transport and telecommunications.

Third: Seeking Production Efficiency Including:

- 1- The cost of assets and materials readjusted to match the level of productivity of the local workforce.
- 2- The cost of other inputs such as transport, telecommunications into, out of and within the country, and the cost of other intermediate products.
- 3- Membership of regional organisations, and integration agreements which allow the establishment of utilities at the regional level.

The presence of these elements in the host country whether wholly or partially constitutes strong incentives for investors, representing the most important factors that determine the policies that tend to create a suitable climate for attracting direct foreign investment.

In the case of Libya, however, despite drawbacks such as the inadequacy of the local markets, many positive points still exist, such as:

- 1- The unique geographic location of the country.
- 2- The numerous resources and assets available that will assist the establishment of the different investment projects.
- 3- Its regional, Arab, African and Mediterranean links, which will help in solving problems associated with the inadequacy of the local markets and the per capita income.
- 4- The cheap national and foreign emigrant labour.
- 5- The adequate energy sources such as fuel and electricity available at suitable costs.

### **5.13 The role of the Libyan government in promoting FDI inflows**

“There is nothing in the Libyan economic system which opposes private business, foreign investment or Libyan public or private partnership with overseas companies. The USA and France still need to normalise relations with Libya before business links could be established with them. The third five-year plan sets targets for investment and non-oil economic growth of US\$35bn in 2001-2005. A rail network, linking Libya with Chad and Niger, telecommunications, tourism, non-oil minerals, fisheries and roads are the main targets for foreign participation. Creating more jobs is a priority. Inflation is under 10 per cent and in 1999 there was a trade surplus of USD 3bn. Libya is self sufficient in cement, iron and steel. Non-oil industry counts for 12 per cent of GDP. In the past five years there was no increase of public debt. Seventy per cent of state revenues are used for development. Foreign investment and joint ventures are encouraged when the projects provide goods for Libya and for export to Africa. European and Asian companies compete to partake in the investment, while US companies have to stay aside due to the 'Iran Libya Sanctions Act' (ILSA). The 'Libyan Sanctions Regulations' prevent US companies from dealing with Libya. ” (Muammar ALQADAFI, International Conference on Development & Investment in the Libya, held in Tripoli in November 2000).

Libya has adopted a number of economic policies that will encourage the inflow of foreign capital. The issuing and enforcement of legislation that will help in attracting

foreign investors, for example, Law No. 5 of 1997 in relation to encouraging the investment of foreign capital, Law No. 21 concerning economic activities and Law No.1 of 1993 concerning banks, currency and credit. The standardisation of the exchange rate of the LD with respect to foreign currencies, especially the dollar. The exchange rate used to constitute a serious problem for investors regarding the procedures associated with money transfer, import and export. The expansion of the base for ownership of economic units which were initially owned by the public sector, paves the way for the local or the foreign private sector to take part in the management and operation of these units. This will give a great boost to investors trust in the government, and will encourage foreign and local investment: The most important of these policies are:

- 1- The government is considering changing the 40-years hydrocarbon legislation to improve terms for foreign investment.
- 2- Issued Foreign Investment Law No.5 of 1997 and extended it to Law No.7 in 2003.
- 3- The Libyan Foreign Investment Board (LFIB) was created as an implementation attachment for Law No.5, to manage and regulate foreign investment in Libya's ageing and obsolete industrial base, which was characterized by an absence of national industrial planning, out of date technology, incompetent management, low maintenance, slow restructuring and over-employment. While theoretically LIFB has an investment-promotion mandate, at the present time LFIB's remit is limited to processing a surfeit of foreign investment inquiries, except those related to tourism, or the Misurata Free Zone. Applications for investment in those sectors should be directed to the Ministry of Tourism and the Free Zone authority,

respectively. LFIB is essentially a “one-stop shop”, providing services needed by foreign investors, including those related to customs and immigration, taxes, and labour-related issues (U.S. Department of State, 2005). Moreover, one of the main objective of the LFIB is to register and control foreign investment in Libya (see Appendix 14) Application Form for foreign investors to invest in Libya).

- 4- Libya solved all the external problems with the international community. For example, Lockerbie with USA and UK, UTA with France, and Label with Germany, and Libya’s decision to disclose and dismantle its WMD programs. By taking these steps towards ending its international isolation. The new relationship with the world community opens the door for new multinational oil companies to invest in Libya, also the new political environment can lead to new better economic environment since sanctions lifted in 1999.
- 5- Adoption of new open economic policies to diversify the national income.
- 6- Considering reform policy including privatization policy in some sectors.
- 7- Incentive policies for multinational companies to invest in Libya.
- 8- Infrastructure development including transportations (air, land and sea), telecommunications, hotels, IT technologies, electricity, water and sewerage nets system.
- 9- Libya is important part of the North African pipeline Gas Project.
- 10- Completion of the gas flows pipelines project which cost \$5.6 billion and 540km long from Libya to Italy under the Mediterranean Sea in 2004. Libya also plans to stop gas flares by 2008.

There are signs that Libya is now moving towards a variety of economic reforms and a reduction in the state's direct role in the economy. In June 2003, the Revolution Leader said that the country's public sector had failed and should be abolished, and called for privatization of the country's oil sector, in addition to other areas of the economy. The Revolution Leader also pledged to bring Libya into the World Trade Organization (WTO). In June 2003, Libya unified its multi-tiered exchange rate system (official, commercial, black-market) around the IMF's special drawing rights, effectively devaluing the country's currency. Among other goals, the devaluation aimed to increase the competitiveness of Libyan firms and to help attract foreign investment into the country.

However, great efforts are still needed to persuade foreign capital investment and make the country look attractive and more competitive. These efforts should include the approval of policies and the amendment of legislation concerning economic and financial policies at both the national and international levels, in order to attract investment to activate the socio-economic development programmes that will increase the rate of growth of the national economy. The necessary policies and legislation can be outlined as follows:

#### **5.14 Policies and Legislation Needed to Encourage FDI to Libya**

The new Libyan government policy mainly aimed at putting an end to government intervention in economic activities, is aimed at enhancing the contribution of the investment projects to GDP. In this respect the government of Libya has considered a



plan for national investment until the year 2005 with an estimated total cost of \$35 billion. This sum was distributed between foreign and local sectors to cover different economic activities incorporating both services and production sectors: most importantly of which were the oil sector (\$6 billion), the electricity sector (\$6 billion) and the water sector (\$8 billion). In addition, other projects received \$15 billion including improving the seaports and other infrastructure, the renovation of submarines, reducing environmental pollution, and improving air services and other means of transport (Libyan Investment, 2003).

- 1- Despite the positive impact of these policies, the investment climate still needs more clearly cut economic policies including:
- 2- Restrictions should be removed on foreign exchange and by activating the role of banks and other financial institutions in providing long-term and short-term loans and credit facilities should be encouraged. The implementation of clear policies that will provide investors with easy sources for funding their projects is a prerequisite for boosting investment.
- 3- The availability of development plans at both the central government and regional levels is another essential element. These plans will tend to outline the different requirements, and therefore the different projects needed to satisfy these requirements, for each region. Moreover, these plans will make it possible for policy makers to spot the right investors, whether local or foreign, for the execution of different projects, especially with regard to the production of consumer goods and in providing services.
- 4- The proper organisation and location of investment projects through establishing

industrial areas will make it easy for investors to obtain suitable locations for their projects. This arrangement will also tend to protect the environment by limiting industrial utilities to certain areas in the towns and cities, besides making it easier for the authorities to provide these areas with the necessary services.

- 5- It is important to establish centres to assist in promoting tourism projects by providing the necessary services in this field. These centres should be established in provinces with considerable potential for tourism, such as old cities with abundant archaeological sites, and other tourist attractions such as beaches, and deserts.
- 6- The continued survey, exploration and extracting of natural resources.
- 7- Infrastructure and other basic facilities should be improved so that they meet international standards. These include drinking water and sewage networks, electricity, roads, transport and telecommunications, especially stationary and mobile telephone services. All these services are important for sustaining investment projects. In this regard, however, investors can be persuaded to invest in development projects, particularly projects involving the generation of electric power and mobile telephone services.
- 8- Modern technology should be introduced in the field of information, and projects in this field should provide the required services at cheap and competitive prices, as is the case in most developed countries in the world.
- 9- Priority should be given to the development of human resources through intensive training. This training should be undertaken by specialised institutions that match international standards. This will provide the skilled labour needed to

execute the investment projects. In this regard training per se' is a potential area for investment provided that projects in this area are well managed and controlled to provide the required quality training programmes.

10-Modern information systems should be established incorporating all economic sectors. These systems will provide the necessary statistical information with regard to socio-economic and demographic activities on a regular basis. This will enable investors to conduct the necessary studies to investigate issues such as the nature of markets, consumption trends, the availability of resources and the nature, size and composition of workforces.

11-One of the most important aspects for encouraging investment is the implementation of consistent policies with respect to standards and specifications in relation to both local and foreign products. Any products that fail to meet the required specifications should be removed from the market for the sake of fair competition.

12-The establishment of consumer protection associations should be encouraged, providing them with an active role in controlling consumer goods with regard to specifications, prices and the quality of these goods.

13-The activation of the provisions of Law No. 5 will encourage foreign investment by stipulating the establishment of a special government body for this purpose (the Authority for Investment). Enforcing this law will make life easy for investors ensuring that all services will be provided by a single government body.

14-Banking services should be improved by introducing credit cards, to insure smooth transactions for visitors to Libya in general, and foreign investors in

particular.

15-Conferences and symposiums which promote investment in Libya should be encouraged. In this respect the role of both local and foreign media should be pivotal.

16- Administrative procedures for investors should be stabilised by the delegation of these procedures to a single government body. This can be achieved through the investment office in every province. This office will be entrusted with the licensing and the location of investment projects and the removal of potential obstacles.

17-A stock exchange should be established, which will provide investors with the necessary means to promote their projects and companies. For example, it will provide them with the necessary funding through selling shares or bonds.

18-Establishment of the Investment Authority which will undertake the implementation of the law. This authority will be the only government office available for investors to do business with as the case in most countries.

### **5.15 Overview of Future Development and Investment in Libya**

The final resolution of the Lockerbie question, coupled with the scrapping of its weapon of mass destruction (WMD) programme, put an end to the international economic embargo on Libya-ending its economic isolation and leading to a noticeable economic and political openness. In this regard Libya has joined a number of international organisations, including the WTO, besides its initial status as a non-voting member of the Euro-Mediterranean partnership agreement. Libya is also a member of other Arab

and international organisations such as the Arab Organisation for Free Trade and the 5+5 Club which includes five European and five North-African states. Also, after estrangement for more than seven years, Libya has resumed its relationships with the International Monetary Fund (IMF). This move was initiated by the visit of the IMF Commission to the country in 2004 with the intention of discussing economic reform policies. Libya is deemed by many international analysts as a promising country for future investment. Libya's intentions for economic openness are coinciding with the gradual modification of the state's economic policies to accommodate a market economy, rendering it less government-directed in order to achieve what is known in Libya as "the peoples capitalism". This will involve a national strategy, mainly based on elements such as the diversification of production, the determination of priorities, the encouragement of the private sector, seeking economic partnerships, encouraging direct foreign investment and upgrading the banking and financial sectors.

The macro economic indicators suggest that the Libyan economy is doing fairly well, showing an estimated growth rate of 2.3% in 2003 which is slightly higher than those in 2001 and 2002 of 1.5 % and 1.1 % respectively. Nonetheless growth rates in 2004 and 2005 are expected to exceed the 5% mark. The internal equilibrium (i.e. the ratio of budget surplus to the GDP), stood at 13.7 % in 2003, whereas the external equilibrium (i.e. the ratio of the current account to the GDP) was 47.9% in the same year. Moreover the drop of \$4.5 billion in the country's foreign debts, an increase of \$18.6 billion in government reserves, the stability and the standardisation of the exchange rate of Libyan Dinar (L.D) against the US Dollar, and a GDP of \$21.3 billion with an estimated per capita of \$7570, are all indicators of a healthy and growing economy.

However, with regard to human development Libya is rated as medium according to the UN Human Development Programme.

The banking sector in Libya constitutes five state-owned commercial banks and an increasing number of domestic specialist banks. All banks in Libya are under the direct control of the Central Bank. Libyan investment abroad is monitored by the Libyan Arab bank. However, in 2003 two banks were established by the private sector. These were the Commercial Bank for Development and the Tourism Development Bank. In addition Libya has received offers from international financial institutions to take control of Libyan investment in stock exchanges particularly in North Africa and the Gulf as well as in the European financial centres. Also, Libya is considering the introduction of a credit card system and other banking arrangements accompanied by the necessary provisions to facilitate the quick transfer of money and other transactions. Libya is also considering a proposal made by the Islamic Bank of Qatar regarding the idea of establishing “The Libyan House of Funds” as an Islamic Bank and the establishment of an insurance company that will operate according to the Islamic principles of “Sharia”. The country has also taken the first steps towards establishing its own stock exchange. This move was initiated by the Central Bank, which for the first time has opened an office to register the sale of shares. In this regard, a committee has been established to draft the legal framework for the proposed money market in order to meet the requirements of the sales of shares on offer in the context of the privatisation programme.

To cope with the growing need for information technology, a plan was approved in

early 1999 to promote digital and telecommunication systems by doubling the investment in this sector from an initial \$4.2 billion to \$9 billion. The plan intends to increase the number of Internet users from 850 thousand to 2 million and the number of service providers from two to seven, given the fact that growth of Internet cafes is rampant in Libya i.e. 3000 centres.

Moreover, in order to boost investment, Law No.5 of 1997 was designed to encourage foreign investment. This law sets certain conditions for foreign investment. Most importantly, the project must produce items for export, and the project must provide opportunities for employment with the potential for training local people. This law also offers customs and tax exemptions on equipment, machinery and spare parts for the use of the project, and a 5-year exemption from income tax extendable for another three years. Exports are also exempted of production tax and any other fees. The law also gives more privilege to priority projects in the development plan, leaving the door open for investment in production and service sectors including manufacturing, tourism, healthcare, telecommunications, air transport, fisheries, electrical power, drinking water and sewage networks, desalination, agriculture and other sectors. However, the law provides investors with all the necessary guarantees and assurances, including the free transfer of capital and profits.

The Libyan Corporation for Investment has been keen to facilitate licensing procedures given the fact that projects with an estimated value of \$700 million were expected to be licensed by the end of 2003. A total of 65 projects were licensed, covering areas such as manufacturing, healthcare and tourism and work has already started in 14 of these 17

projects. However, following the recent establishment of the High Council for Investment, Libya became host, for the first time, to the conference for International Investment (April 20-21, 2004). This convention was mainly intended to brief attendees on the opportunities available for investment in Libya. The conference was attended by over 400 Arab and foreign investors. One of the outcomes of this move was an agreement between Libya and the state of Abu Dhabi to establish a Common Council for Investment.

Nonetheless, investment in the oil and gas sector has been the main priority of the government. By opening the door for investment in this sector, the government is hoping to increase production to 3 million barrels of oil per day by injecting \$10 billion of foreign investment into the sector by the end of the year 2010. In this regard the government of Libya launched an investment programme in 1999 at a cost of \$35 billion spanning the period 2002-05 for the development of the oil sector and to boost oil exploration in 150 new areas. Foreign investment is expected to constitute 30-40% of this investment through the signing of new agreements and partnerships. However, Libya has also welcomed the return of American oil companies, which withdrew from the country in 1986 following the Lockerbie crisis. These companies constitute the Oasis consortium, which has operated in Libya since 1955 with an estimated production of 850 barrels per day. Moreover a number of companies have signed agreements involving oil exploration in Libya in 2003, including German companies (\$56 million), and joint ventures with Spanish and Austrian companies (\$91 million). On the other hand, during the summer of 2003 around twenty tenders involving the oil sector were put on offer, with five more concessions for oil exploration on offer in the summer of



2004. Furthermore the government of Libya signed an agreement in March 2003 for a strategic partnership in the field of exploration for the production of oil and gas with the Shell Company for a cost of \$200 million. The company is due to start its operations with a project for the development of the gas fields and a factory for the liquidification of gas at a cost of \$200 million in the Marsa Albereiga region. Libya also hosted three companies from Norway in April 2000. The main purpose of the visit was to discuss the possibility of cooperation in the field of oil exploration.

With regard to telecommunications, \$15 billion have been allocated for the development of this sector. This will involve huge projects aiming at increasing the capacity of the system by 38% by the year 2020, creating 1.5 million new normal telephone lines and more than 2 million mobile telephone lines, in addition to upgrading the international telecommunications network services, postal services, optic fibre cables (5000 km), 2000 km of digital lines and establishing satellite stations. The Public Company for Mail Services and Telecommunications in Libya has signed four contracts with a consortium of international companies in the field of wired and wireless telecommunication. Furthermore the government of Libya has allocated \$7 million for the development of the tourism sector. The main aim of this move is to diversify economic resources, rendering the Libyan economy less dependent on oil, besides highlighting the opportunities available for investment in the tourism sector. Hence, the Corporation for the Promotion of Tourism in Libya is looking to attract around one million tourists annually by the year 2005 compared to the current 135 thousands to numerous archaeological sites, the 1770 km of beaches and the vast western desert available in Libya. However, the current contribution of the tourism sector to the GDP

is estimated at less than 1%, with total earnings from tourism standing at \$20 million in 2002. However, two hotels have recently been built in Tripoli by the Corenthina Group of Malta for a total cost of \$100 million. One can accommodate 1200 visitors and the other 300. A Dutch tourism company is also currently involved in ten projects in the province of Tubrug to be completed within 10 years for an estimated cost of \$1.23 billion.

The Libyan Arab foreign company plays a major role in controlling Libyan investment abroad. This company possesses shares in a total of 98 companies operating outside the country, with 26% of these companies operating in Arab countries, 30% in African countries and 3% in Latin American countries. Other companies in Libya associated with investment abroad include the Oil Invest Company and the Libyan-African Company for Investment. Moreover, Libya's commercial and trade relationships with neighbouring North-African countries has made significant progress. For example, LAFICO built three hotels in Algeria in 2003 for a total cost of \$320 million, and an agreement was struck between the two countries to protect investment. Also, a Libyan-Tunisian company has been established to be in charge of oil supplies and to build a pipeline linking Zawya refinery to the Sukhaira sea port in Tunisia. Furthermore the two countries are intending to activate a customs agreement given the fact that the volume of trade between them has exceeded one billion dollars annually. Among Arab countries Libya is the most important investor in Tunisia. Libyan investment in Tunisia involves more than 35 companies with an estimated value of \$200 million distributed between construction, textiles and tourism.

A consortium of four Egyptian companies has signed a contract with the Libyan government to extend its power network (750 km) for a total cost of \$100 million, linking it with the Arab Unified Network for Electric Power. The total Libyan investment in Egypt is estimated at \$200 million, incorporating 96 projects including Midour refinery. In addition Libya is investing in 6 projects involving the Egyptian free market system for a total cost of \$8 million, of which Libya owns 61.5%. The two countries are negotiating the relieving of trade restrictions between them given their \$40 million volume of trade. In this respect, the removal of customs tariffs and other similar taxes are top of the agenda. The two countries are also planning a common project for agricultural investment for an estimated cost of \$100 million to boost cooperation in this important sector. This is in addition to the trade and customs agreement signed by the two countries aiming to facilitate the flow of goods especially food and building materials, medicines, vaccines and other medical equipment. To enhance the trade relationship between Libya and Egypt, a special unit has been established to settle trade conflicts and to take the necessary steps to improve the roads linking the two countries. These relationships will be further strengthened through the cooperation between the Egyptian-Libyan Association for Investors and Businessmen and the newly born Libyan Association for Businessmen. Two Egyptian companies are currently involved in power line projects in Libya for a cost of \$11 million.

Moroccan and Libyan relationships are showing noticeable progress; mainly intending to remove trade obstacles and initiate investment projects between the two countries. Cooperation between medical institutions in the two countries is already in progress, exchanging expertise in the medical field.

Libyan investment in Africa south of the Sahara includes 245 projects at a total cost of \$98 million. A total of 77 Libyan companies operate in a number of African countries. Libya is also planning to invest in 1837 new projects in Africa with an estimated cost in excess of one billion dollars. This huge investment involves sectors such as tourism, agriculture, mining and manufacturing, and the Libyan-African Company for Investment is likely to play a major role. Libya has also signed agreements for cooperation, including barter trade involving oil, with countries such as Senegal, Niger, Mali, Zimbabwe and other African countries.

In 2003, Libya signed bilateral agreements for the encouragement and protection of investment with Belgium, Germany, Portugal, Malta and Iran. Also Libya is interested in signing agreements with Australia for the enhancement of trade and investment in the fields of agriculture and livestock, construction and the automobile industry. A common committee involving Libya and Turkey has also resumed its activities after being frozen for seven years. Negotiations are also in progress with the Ukraine, Indonesia and Croatia aiming at improving trade and boosting investment in the fields of oil exploration, production and refining. Ukraine is currently bidding for two contract in Libya, one for building 992 km of railway lines and the other for building a highway for accost of \$2 billion and \$200 million respectively. To boost its trade relations with China, Libya is planning to import 4000 Chinese vehicles for a cost of \$20.8 billion. Likewise, to promote its cooperation with S. Korea Libya has signed a contract with the S. Korean giant Hyundai for Engineering and Construction to increase the capacity of the Zawya power station from 660 to 960MW. In order to strengthen its economic cooperation with Spain, two Spanish companies have signed two contracts to build

power lines and power stations in Libya for a total cost of \$301 million.

From the foregoing it is obvious that Libya is putting strenuous continuous effort into enhancing its economic growth and achieving sustainable development. Nonetheless, these efforts are mainly focussing on making the country more attractive for investment for the regional as well as the international capital.

Fierce competition is raging for the attraction of foreign capital, not only among companies but among nations, including industrialised nations which have the lion's share of the foreign capital. A United Nations Conference for Trade and Development report (UNCTAD, 2003) pointed out that the industrialised nations share of the direct foreign investment stood at \$460 billion out of a total of \$651 in 2002, representing approximately 71% compared to the 29% shared by the rest of the world. Nonetheless this fierce international competition to attract foreign capital for direct investment urges national governments to create the right environment for investment and to issue the necessary legislation which encourage investors by providing them with the necessary privileges and guarantees. This implies that the state should adopt suitable economic policies and legislation to secure success.

However, the right climate for success can be created by integrating a number of factors, the most important of which concern economic and financial policies, the administrative system and the just, transparent and effective legislation. Other factors include the availability of resources, geographic locational, the nature and the mechanisms of the local market, infrastructure including roads, telecommunications etc,

technological advancement and the political stability.

### **5.16 Conclusions**

Libya is trying to reduce its dependency on oil as the country's sole source of income, and to increase investment. Libya is also attempting to position itself as a key economic intermediary between Europe and Africa, and has become more involved in the Euro-Mediterranean process, and has pushed for a new African Union. Libya's re-acceptance into the international community has generated significant opportunities for foreign businesses, and has already elicited considerable interest from investors worldwide, Libyan authorities are inaugurating a new era of openness. In this regard, Libya's agreement to the publication of 2003 IMF Article 4 report could be considered move towards this goal. The business environment has been changing, and the most important Libyan businessmen are now involved in import/export business. Several initiatives have been taken by the Economy and Trade Ministry, the Libyan Union of Chambers of Commerce, Trade and Industry and the Libyan Foreign Investment Board. The final aim is to connect the Libyan economy to the world's trade and investment flows, to the globalisation stream. One very important step in this direction will be the accession to the World Trade Organization sought by the Libyan Government. Although they have not even entered the pre-negotiations phase, the goal is clear; they are moving towards it and they seem confident of the final positive result.

However, to realize its full economic potential, Libya needs to offer an open and reliable business environment, and in this regard there is still a long way to go. Libya

has the potential to be a leader in the economic development of the region. With its small population and significant natural and historic resources, it could be a catalyst. However, as with many other countries in the region, its leadership and its policies could hold the country back. Libya is now at cross-roads and the most immediate events may turn out to be crucial for the future of the country.

## **CHAPTER SIX**

### **RESEARCH METHODOLOGY AND DATA.**

#### **6.1 Introduction**

This chapter highlights some of the data gathering techniques which researchers use in general, and this study has employed in particular. The chapter is divided into four sections. The section that follows this introduction deals with general forms of data gathering methods that are applied in research. The third section outlines the specific aspects of the data analysis methods employed in this study. The fourth section describes the research model employed in this research.

#### **6.2 Data Gathering Techniques**

Research data can be collected in different ways, and also from different sources. Two commonly used data collection methods include conducting interviews and carrying out questionnaire surveys. Data gathered in this way can be classified as primary rather than as secondary. The distinction between these categories is as follows:

- 1- Primary data sources embrace individuals, groups, and panels of respondents specifically set up by the researcher, whose perceptions may be sought on the importance of certain issues.
- 2- On the other hand data can also be acquired from secondary sources, such as international organizations, government publications, official statistics, media industry analysis, and company records.



### **6.2.1 The Questionnaire**

The objective of the questionnaire was to present evidence relating to the factors determining the activities of foreign oil companies (FOCs) in the Libyan oil sector (See appendix 1), through highlighting the following:

1. To find out from the point of view of foreign oil investors what factors shaped FDI in the Libyan oil market. This data is used to confirm whether or not their choice of factors are in line with theory.
2. To survey the Libyan oil and gas sector regarding the main objectives of the study.
3. To highlight those areas where there are wide variations granted by the Investment Laws No 5 &7 and the Petroleum Regulation to provide the researcher with an indication as to which of the indicators were of most importance to the foreign oil companies.
4. To gather recent insights and perceptions of FOCs regarding the FDI environment in Libya.
5. To compare the primary data with secondary data results.
6. To develop a more complete picture of FDI inflows from different perspectives within the Libyan oil sector.

In view of the disadvantages of mailed questionnaires, a personally delivered and collected questionnaire was chosen as the main survey instrument for the study. The questionnaires, as will be seen later, were delivered and collected by the researcher and his assistants.

By personally delivering and collecting completed questionnaires the researcher had the opportunity to:

1. Introduce the research topic, the purpose of the survey, and why each individual respondent was chosen to answer the questionnaire.
2. Initiate a good level of communication with the respondents, and to motivate them to give honest answers by assuring them of confidentiality and by explaining to them that their contribution would help ensure that a richer data base of research materials was constructed.
3. Correct misunderstandings and to provide necessary explanations (in a nondirective way) with regard to any question.
4. Collect finished questionnaires within a reasonably short period of time and to check them for completeness.
5. Achieve accurate sampling and possibly increase the response rate from the questionnaires.

Since an essential aspect of the empirical work was to explore views and perceptions, the instrument used was the questionnaire survey. At a methodological level, various limitations arise from the use of a questionnaire survey and the views received from respondents.

The limitations of questionnaires among others include the following:

- 1 Respondents may feel that the researcher's values, beliefs, education, ideologies and other factors are implied in the questions, and that these may influence their answers.
- 2 The views and opinions of respondents may be influenced by their values, beliefs, education, occupations, and other factors.
- 3 The researcher's interpretations and understanding of participants expressed views and perceptions may be subjective.
- 4 The choice of some groups in Libyan society may lead to bias.
- 5 Some of the questions in the questionnaire may be misunderstood or misinterpreted by respondents.
- 6 Respondents may not provide honest answers to the questions.
- 7 Targeted respondents may not actually answer the questionnaire, or may be influenced by the views of somebody else.
- 8 Response rates are not usually as high as might be required. With low response rates it is difficult to prove the representativeness of the sample.

#### **6.2.1.1 Detailed Analysis of Questionnaire by sector.**

- **Section One: (Background Information)**

Section one was designed to collect background information relating to the FOCs investing in Libya. It consists of ten questions seeking to gather information as to the company's name, location, nationality, ownership, and respondent's position, duration of operation in Libya, main activities, investment method, investment mode, and choice of local partner. These independent variables are analysed later to determine whether they lead to differences in the opinions of respondents regarding the issues addressed.

- **Section Two: (Factors Attracting FDI in the Oil Sector)**

Section two of the questionnaire attempted to explore the factors attracting FOCs to invest in Libya. It consists of seventeen questions seeking to gather information such as Libyan market size, oil reserves, level of production costs, strategic position, local investment laws, and oil quality. The choice of these factors was based on the literature review of the determinants of FDI in host countries and the theories of FDI (Chapter 5).

- **Section Three: (Main Difficulties Facing Foreign Investment)**

In the light of the review of the appropriate literature on the Libyan oil and gas sector (Chapters 3), and FDI determinants (Chapter 4), factors which might affect FDI inflows in Libya were tested. These factors include technical, employment, managerial, financial, marketing, government investment laws, government regulations, and environmental issues. The purpose of section three was to investigate the main difficulties and obstacles facing FOCs in the Libyan oil and gas sector. Also, the

participants (foreign oil companies) were asked to give suggestions and comments concerning the Libyan FDI environment and the promotion of foreign oil business in the Libyan oil sector.

#### **6.2.1.2 Questionnaire Design**

In constructing this questionnaire, the principles of designing good questionnaires were followed. These principles relate to the type, sequence, and scaling of the questions (Sekaran, 1992: 202), and to the pilot-study (Oppenheim, 1992: 128). Accordingly, these principles are addressed the following sections

- **Wording and Language**

In constructing this questionnaire, considerable effort was made to ensure that the questions asked and the language used would approximate the level of understanding of the respondents and thus elicit their attitudes, perceptions, and feelings. In order to eliminate the most obvious problems involved in questionnaire wording it was attempted to use simple words, to avoid abbreviations and technical terms, and to make questions as short as possible. Furthermore, double-barrelled questions were avoided, as were leading questions, negative questions and questions that might artificially create opinions.

- **Types of Questions**

The wording of the question itself is only one part of the picture. Careful attention must be given to the response categories accompanying the question. A distinction should be made between two main types of questions, open-ended and closed questions.

Open-ended questions allow respondents to formulate their own answers in any way they choose.

#### **6.2.1.3 Questions Order**

The order of questions should be such that the questionnaire progresses from general to specific questions and from questions which are relatively easy to answer to those that are progressively more difficult. However, in constructing the questionnaire the following guidelines regarding question sequence were employed:

- 1- Grouping questions into sections provides a flow to enhance the structure of the questionnaire.
- 2- Placing sections and questions in logical order keeps respondents' concentration and train of thought connected.
- 3- Progressing from general to specific questions.
- 4- Progressing from easy questions to more difficult questions.
- 5- Keeping open-ended questions to a minimum and placing them towards the end of relevant sections.

#### **6.2.1.4 Question Scaling**

Certain scales have been devised that allow the researcher to measure the variables of interest. In the first section of the questionnaire (general information), a nominal scale was used. The nominal scale allows the researcher only to "qualitatively distinguish groups by categorising them into mutually exclusive and collectively exhaustive sets

(Sekaran, 1992: 161). The respondents were required to tick or circle the subject, classification or characteristic most appropriate to them.

In all sections of the questionnaire, the respondents were asked statements based on their perceptions. To indicate the extent to which they would choose one among a variety of respondents were requested to tick or circle one of five numbers giving a sliding scale of agreement ranging from (1) Not Important to (5) Most Important. Thus, a standard Likert scale (interval scale) was used throughout the questionnaire. This scale was designed to enable descriptive statistics to be compiled and to measure the magnitude of the differences in preferences among the individuals.

#### **6.2.1.5 Pilot Study**

The pilot-study is the final stage in questionnaire construction and is one of the most important. This stage helps the researcher to identify and amend technical problems and defects relating to the questionnaire.

As it was assumed that all of the respondents from FOCs would speak English, the complete English versions of the questionnaire were pre-tested twice. The questionnaire was provided with relatively more blank spaces than usual to allow and encourage respondents to comment. With regard to the first and second phases of the pilot-study, the following general procedures were adopted:

- 1- Respondents were told that they were participating in a pre-test exercise
- 2- Since the questionnaires for the pilot-study were personally delivered and

collected, the researcher introduced the research topic and its significance and the purpose of the survey to motivate participants to give their honest answers and comments.

3- The pre-test work was conducted in the same manner as the final study.

Accordingly, the questionnaires were personally delivered and collected:

4- The participants were asked to complete the questionnaire as instructed.

Furthermore, they were asked for their critical analysis of all aspects of the questionnaire, such as question wording and language, type, sequence and scaling, unnecessary questions, and insufficient space for answering open-ended questions.

#### • **The First Pilot Study**

In the first pre-test of the questionnaire, the complete questionnaires were delivered to my supervisor and some staff members and postgraduate students at Newcastle Business School in Northumbria University, to get their views and comments on the questionnaire in terms of numbers, order bases, meaning, and clearness of the questions

After the comments and recommendations of the participants were received, insightful and useful critical comments and recommendations were dealt with. Accordingly, the questionnaire was revised, and modified versions were produced in Newcastle.



- **The Second Pilot Study**

The second phase of the pilot-study was conducted in Libya. The questionnaire which resulted from phase one was personally delivered during nine face-to-face structured interviews with FOCs investing in Tripoli, Libya. A summary of interviewees by position is given in Table 6.1.

**Table 6.1: Position and Number of Respondents in the second pilot study.**

<b>Position</b>	<b>Number</b>
Top-Manager	1
Vice-Manager	2
Middle-Manager	2
Chief-Executive	4
<b>Total</b>	<b>9</b>

Following the receipt of the responses from FOCs and comments from participants in the second phase of the pilot study, the researcher dealt with constructive critical comments and recommendations. Consequently, the questionnaire was revised for the second time in Libya and the final version constructed. The final copies of the questionnaire were distributed in the final survey.

The objectives of the second pilot study were:

- 1- The responses were to be used, in part, as a pilot study for the final and second survey by questionnaire.
- 2- To get more in-depth information about variables relating to FOCs' investment in the Libyan oil and gas sector.

- 3- To make sure that the respondents understood the issues covered in the questionnaire in the way that the researcher intended;
- 4- To make sure that the questionnaire questions were properly understood by the respondents, and to cover all the main factors determining FDI in the Libyan oil and gas sector.
- 5- To gain an overview of and insights into the recent Libyan FDI environment as a whole.

The discussions in the meetings with the participation were not recorded on tape because all respondents objected to interviews being recorded. Furthermore, the taping of interviews might sometimes bias the answers because respondents may be uncomfortable knowing that their voices are being recorded.

The second version of the questionnaire was used as a predetermined list of questions that would be posed to the respondents.

The following general pilot test procedures were adopted:

1. Explained to each interviewee how he was chosen to be one of those interviewed and the significance of his contribution to the study.
2. Tried to establish rapport, trust, and good communication with the interviewees and to encourage them to express their honest answers without fear of adverse consequences. To this end, the researcher stated the purpose of the study, the purpose of the interview, and assured complete confidentiality about the sources of responses.
3. Generally informed the interviewees that they were participating in a pre-test study

- for the questionnaire.
4. Requested that the interviewees: (a) answer the questions as instructed; (b) express their critical analysis of all aspects of the list of questions that would be posed to them, such as question wording, type, sequence, and scaling; and (c) show whether or not the questions posed covered all the main factors important to foreign oil companies in Libya.
  5. The questionnaire was referred to while conducting the interviews. In addition, the researcher asked the same questions to each respondent, in the same manner, in the same sequence as stated in the questionnaire, and used the exact wording and language as in the questionnaire. As the respondents expressed their answers and comments, the researcher circled the letter which represented the respondent's answer and recorded their comments.
  6. Attempted to avoid the danger of leading the interviewees. Moreover, the researcher was anxious to avoid any possibility of encouraging or discouraging certain types of responses through indication, facial expressions and other non-verbal behaviour.

After the researcher had conducted the pilot study, constructive critical comments were dealt with. Subsequently, the questionnaire was again revised and the final copies of the questionnaire were produced. The findings of the pilot survey support, to a great extent, the findings of the questionnaire survey.

#### **6.2.1.6 The Sample**

Personal contact was made with an official letters issued by the Libyan Embassy addressed to the National Oil Corporation asking for help in getting up-to-date information and data regarding FOCs. The total population of this inquiry is defined to include all those FOCs working in the Libyan oil and gas sector. These FOCs were assumed to be familiar with national oil companies and the economic development practices of oil and gas activities in Libya.

The FOCs from which the sample was to be drawn were defined as all foreign oil companies investing in all the activities of the Libyan oil and gas sector. These companies are involved in the different oil investment activities such as exploration, drilling, production, development, refining and services (The NOC Report 2000: 61-69).

These FOCs were chosen because, firstly, they have long investment experience in the Libyan market. In fact, the first Libyan oil was discovered by foreign oil companies in 1959, and FOCs have played a major role in the Libyan oil market over since. Secondly, they represent the FDI inflows into the Libyan oil sector.

#### **6.2.1.7 Questionnaire Distribution, Follow-up and Collection**

As mentioned earlier, personally delivered and collected questionnaires were the survey method employed in this part of the empirical work. The questionnaires were distributed and collected through the assistance of the foreign oil companies, the NOC and its affiliated companies.

Regarding the sensitivity of the topic for the Libyan government, the FOCs, etc. Three letters were sent to the Libyan embassy (London) explaining my topic and requesting official letters to the following: official letter from the Libyan Embassy (London) to the NOC (Tripoli) for participation in the survey (see Appendix 6). Official letter from the NOC to the foreign oil companies for participation in the survey (see Appendix 7). Official letter from Libyan Students Union UK branch (based in London) to the NOC and the foreign oil companies to participate in the survey (see Appendix 8). Also, there is letter written and signed by me and my supervisor attached to the questionnaire and addressed to the managers of foreign oil companies in Libya, explaining the nature of the research and seeking their participation in the study. Moreover, a letter of introducing was issued by the Ministry of Libyan Higher Education in Tripoli. (To Whom It May Concern), (See Appendix 9). The researcher also sent a letter to The Libyan Prime-Minister (see Appendix 10), and a letter to the Libyan Ministry of Economy and Trade (see Appendix 11) requesting their support in the completing of the research.

During the first visit the distribution, follow-up, and collection of the questionnaires were scheduled as follows: Days 1-10: Handing over questionnaires. The questionnaires with the covering letters attached were personally delivered to different respondents. Days 11-26: Follow-up Visits. Two follow-up visits were made to recipients of the questionnaires. These visits served mainly (a) to operate as a friendly reminder to potential respondents and to encourage them to complete the questionnaires as soon as possible; (b) to collect completed questionnaires; and (c) to thank and encourage respondents. Days 26-33: Collecting Visits. Two collecting visits were made to

respondents in order to collect completed questionnaires, to thank them and inform them that the final day for collecting the completed questionnaires would be seven days later. Days 34-40: Final Visits. Final visits were made to respondents to collect the completed questionnaires.

#### **6.2.1.8 Response Rates**

The response rates from questionnaire surveys are usually not as high as might be desired, and furthermore are generally poor in developing countries. Low response may be attributed to a variety of reasons. Some of these reasons are related to the types of respondents whilst others are related to the nature of the questionnaires themselves. Respondents may not respond to questionnaires because, for example they: (a) lack the time to respond; (b) lack the ability and the knowledge to respond; or (c) are concerned with anonymity and confidentiality. On the other hand, badly written and constructed questionnaires with, for example, inappropriate wording and language, ambiguities, complex questions, and which are too long may decrease response rates.

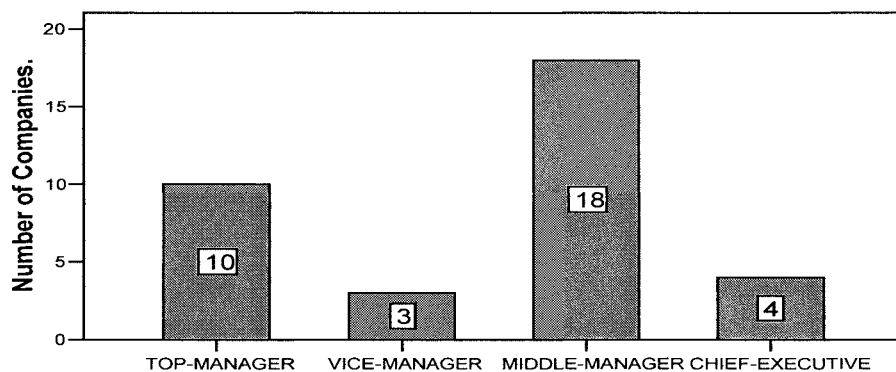
To increase the response rate it was decided to adopt some of the recommended techniques in the literature to overcome the problem of non-response as much as possible (see for example: Bailey. 1978: 138-152; and Oppenheim, 1992: 103-104). Such techniques were discussed above in the questionnaire design sections.

A total of 72 questionnaires were delivered to the all FOCs as respondents. Only 35 (49%) of those questionnaires were collected. A review of the completed questionnaires was then undertaken to assess the integrity of the survey results.

**Table 6.1: Summary of response rates for different oil company respondents.**

<b>Explanations In No.</b>	<b>Exploration</b>	<b>Drilling &amp; Production</b>	<b>Services &amp; Refining</b>	<b>Total</b>	<b>%</b>
<b>Questionnaires Delivered</b>	8	48	16	72	<b>100</b>
<b>Questionnaires Collected</b>	6	23	6	35	<b>49</b>
<b>Questionnaires Excluded</b>	1	3	1	5	<b>7</b>

Figure 6.1 shows that the number who participated in the questionnaire survey were 18 middle managers, followed by 10 top managers, 4 chief executives and 3 vice managers. However, indicates that it is difficult to collect secondary or primary data about FOCs investing in Libya. On the other hand it is also difficult to find a suitable time to meet and ask any of the representatives of such companies that most of their work in the deep desert where the oil fields are.

**Figure 6.1: Number and Position of Responses.**

### **6.2.2 Interviews**

Interviews are one method of gathering information. They involve a process of interviewing respondents to acquire data on the issues of interest to the researcher. Interviews can represent rich sources of data on people's experiences, opinions, aspirations and feelings. In order to achieve this, "researchers need to understand the dynamics of the interview and sharpen their own use and understanding of the different methods of interviewing, together with an awareness of their strengths and limitations" (May, 1995). Interviews can be conducted over the telephone or face-to-face and can be either structured or unstructured (See Appendix 2).

Unstructured interviews are those conducted by the interviewer without a planned series of questions to be asked of the respondents. The main objective of the unstructured interview is to obtain ideas relating to the broad area of interest so that the researcher can develop an accurate notion about which variables require more in depth analysis. At this stage the researcher should be equipped to conduct structured interviews. Before conducting structured interviews the researcher must be clear about what data are required, and should come into the interview setting with a planned series of questions that the respondent will be asked. Structured interviews help the researcher to get more in depth information relating to specific issues of interest.

Transcripts of the face to face interviews in Arabic were distributed to postgraduate colleagues whose native language was Arabic. They were asked for their comments with regard to the English/Arabic translation.



The face-to-face pilot-study for the interviewees was conducted in Libya. The phase one was personally delivered during nine face-to-face structured interviews with the official Libyan. A summary of interviewees is given in Table 6.3.

**Table 6.3: Name and Number of interviewees at the interview pilot study.**

No.	Name
1	The Chairman of Africa Investment Union
2	The Director of Chamber of Commerce, Tripoli
3	The Manager of NOC
4	The Chairman of Libyan Investment Board
5	The Chairman of Teknika Oil Company
6	The Chairman of Umm Al-Jawaby Oil
7	The Head of Oil Research Centre
8	The Deputy secretary of Ministry of Energy
9	The Chairman of Commercial relation Ship

Following the receipt of the responses and comments from the Libyan officials who participated in the pilot study for the interview, the researcher dealt with constructive critical comments and recommendations. The final copies of the interview were conducted in the final survey.

The advantages of interviews may be summarized as follows:

1. They allow the researcher or interviewer to ask open-ended questions.
2. The researcher can possibly record the interviews on audio tape if the respondent has no objection. However, taped interviews might sometimes bias the

respondents answers because “they may be uncomfortable knowing that their voices are being recorded” (Sekaran, 1992: 196).

3. They enable the interviewer to explain to each respondent how he or she came to be chosen for the sample and why it is important that he or she rather than some one else should take part in the interview.
4. They give the researcher the opportunity to initiate good levels of communication and trust with the respondent to make him or her comfortable enough to provide truthful data and answers without any fear of adverse consequences. To this end the researcher should state briefly the objective of the interview and assure absolute confidentiality about the source of the responses.
5. The questions can be modified if this is thought to be necessary. This might involve rephrasing or repeating questions to ensure that they are properly understood by the interviewee.
6. They improve response rates. A questionnaire may easily produce a response rate below 40%, whilst interviews can generally do much better than this.
7. They allow the researcher to more easily communicate with less well-educated respondents. For example, the interviewer can help interviewees who may have reading difficulties, offer standard explanations to specific questions that arise, prevent misunderstandings, keep control over the respondent’s environment when answering questions, and regulate the respondent’s order of answering questions.
8. They stop others answering for the respondent, and they can ensure that all questions are fully answered.

In the summer of 2003 followed by February and March of 2004, 20 interviews were conducted face-to-face in Arabic language with Libyan officials and government representatives. These included senior officials in government in Ministries, Libyan banks, universities, foreign investment organisations, official business organisations and the national oil corporation and its affiliated companies (see the list of interviewees in appendix 2). These officials were chosen because, for example, they were government representatives. The interviews consisted of 24 questions which were designed to elicit Libyan officials' points of view and to derive the up-to-date viewpoints of the respondents about Libyan foreign policy role in attracting FDI inflows to the Libyan oil sector. The oil sector the most important sector in the Libyan economy at the current time.

The information gathered from the interviews and questionnaires survey associated with a time series data analysis model will enable further policy implications based on the study results to be derived.

### **6.2.3 Published Official Data (Secondary Data)**

The term official data is normally used to refer to data which is collected on a routine basis by the government and its agencies. However, for the purpose of this study Official Letters from the Libyan Embassy (London) to Central Bank of Libya (Tripoli) and the National Authority for Information and Documentations, and NOC were used.

National and international agencies provide a rich source of data for the research. However, due consideration should be given to the weaknesses of such data, as well as

its strengths. Official statistics are not simply social facts, but also social and political constructions.

Official statistical data, such as crude exploration and development indicators, prices, production, exports, and revenues levels, represent an extensive source of data on the Libyan oil industry available for analysis by interested researchers. These data are produced or sponsored nationally, either by the state or its agencies, or internationally by international organisations such as the IMF, World Bank, OECD, UNCTAD, OPEC, EIA and OAPEC. Such statistics enable researchers to understand the dynamics of the Libyan oil and gas industry against the backdrop of different national policies, the changing international political situation and the different terms of contractual arrangements. However, despite the shortcomings of official statistics, they are useful for research purposes and provide useful empirical data.

The main objective of constructing this data was to investigate the factors affecting the FDI in the oil and gas sector during 1962-2003. As mentioned in the previous chapters, Libya still depends heavily on the oil revenues to finance domestic social and economic development. The data consists of aggregate figures representing the oil activities include crude oil production, exports, production costs, posted and official selling prices and state revenues. To eliminate quantity and price change effects on the states annual crude revenues, more detailed revenue figures were presented. Official statistics were used to construct this data and were obtained from a variety of national and international sources dealing with the oil industry.

The main secondary data sources to be used in this study are as follows:

1- **National Sources;** Central Bank of Libya. Libyan Foreign Investment Board (LFIB). Association of Foreign Investors in Libya. Institute of Libyan National Statistics. Libyan Foreign Bank. Libyan's National Oil Corporation (NOC). Ministry of Planning. Foreign Oil Companies in Libya. National Corporation for Information and Documentations (NCID).

2- **International Resources;** Organization of Petroleum Exporting Countries (OPEC). Organization of Arab Petroleum Exporting Countries (OAPEC). Arab Development Organisation. World Bank. World Development. International Monetary Fund (IMF). Arab Monetary Fund (AMF). United Nation Conference on Trade and Development (UNCTAD), World Investment Report. International Financial Statistics Year Book, Various years. Energy Information Administration (EIA). Information from various websites (www).

The main objective of creating the data was to investigate empirically the effect of different factors shaped foreign oil investors in the Libya within the study period of 1962-2003.

After addressing the general forms of data collection methods applied in research, it is essential to discuss the specific methods adopted for this research.

### 6.3 Field Survey Results

The questionnaires and interviews were designed to survey a sample of the Libyan businessmen who are running the Libyan Businessmen Association, which promotes the FDI policy programme. The interviews also aimed to survey a number of officials working for the Libyan government. The purpose of the interviews was to gain contemporary insights about Libyan foreign policy and the viewpoint of the respondents.

#### 6.3.1 Questionnaires Results

Figure 6.2 shows, that the 8 French FOCs that invested in Libya represented 23% of total FOCs included in the study sample, followed by 6 German FOCs. The UK constituted of 5 FOCs. There was also 4 Italian FOCs, 3 Spanish and 2 Dutch FOCs. The results show that the major investors in Libyan oil were EU FOCs, these companies enjoyed proximity geographical of Libya.

**Figure 6.2: The Nationality of the Oil Companies.**

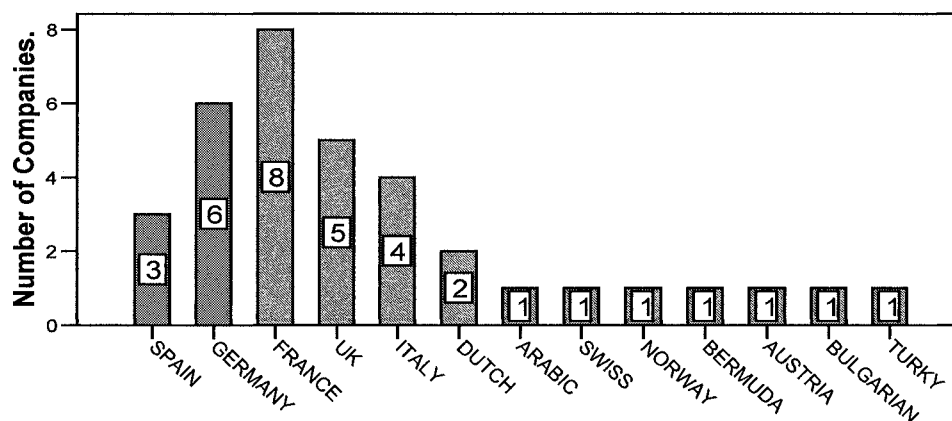
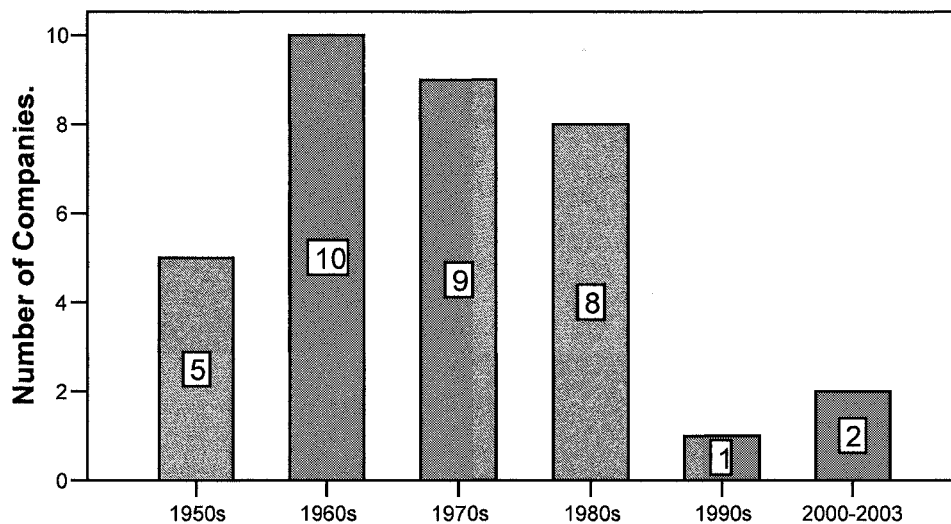


Figure 6.3 indicates that the FOCs started entering Libya in the 1950s. Oil was found in 1958, followed by the first oil production in late 1961. The US oil companies found oil in huge quantities, which was high in quality with lower extraction costs. This encouraged other companies to come and invest in Libya during the 1960s, 1970s, and 1980s. In 1992, the US and UN imposed economic sanctions, on Libya. The US withdrew all of their companies from Libya and imposed sanctions on any FOCs already investing. This adversely affected the Libyan oil sector and prevented FOCs from entering the Libyan market. In 1999 the sanctions were lifted and there was no longer any barriers to FOCs investing in Libya. Together with the adoption of a FDI policy by the new Libyan government, more FOCs were attracted back into Libya, as shown in figure 6.3.

**Figure 6.3: Companies Started Operation.**



As figure 6.4 illustrates, about half of the FOCs investing in Libya were involved in oil exploration and production activities. Exploration for natural gas activities started

in the early 1970s. However, the main natural resource of Libya is crude oil rather than natural gas.

**Figure 6.4: Investment Area.**

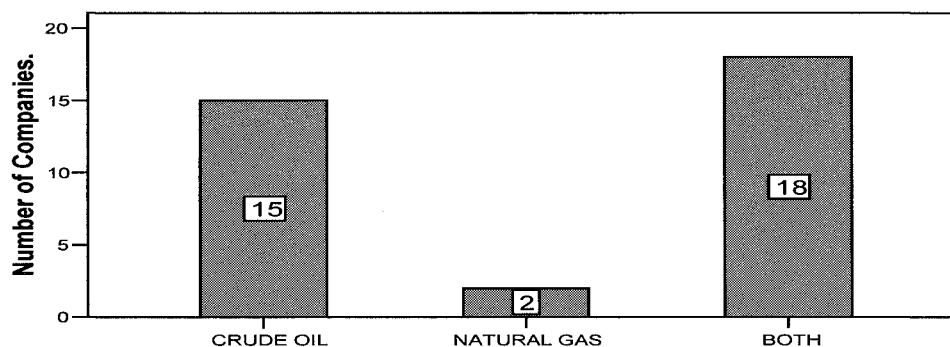
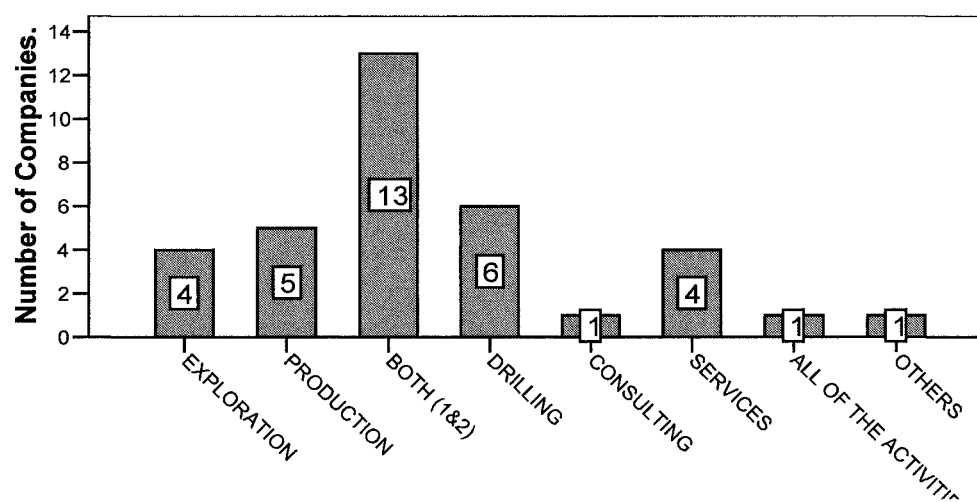


Figure 6.5 illustrates that the more than 63% of the FOCs stated that their most important activities were exploration or production, followed by drilling and service activities. Exploration companies were attracted by the huge undiscovered reserves.

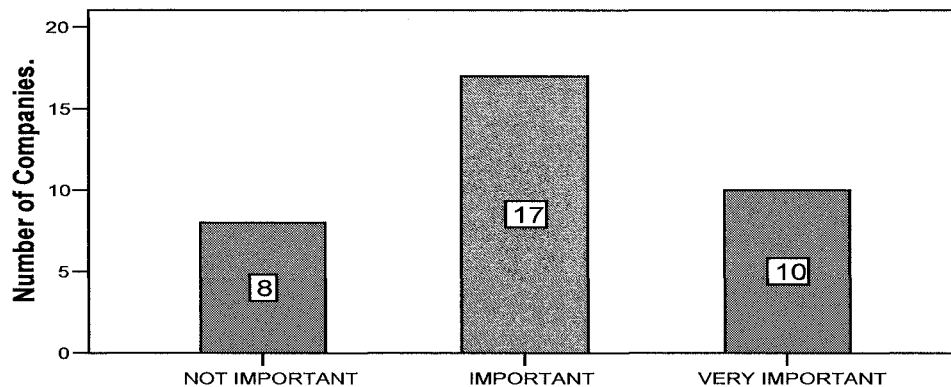
**Figure 6.5: Investment Activities.**



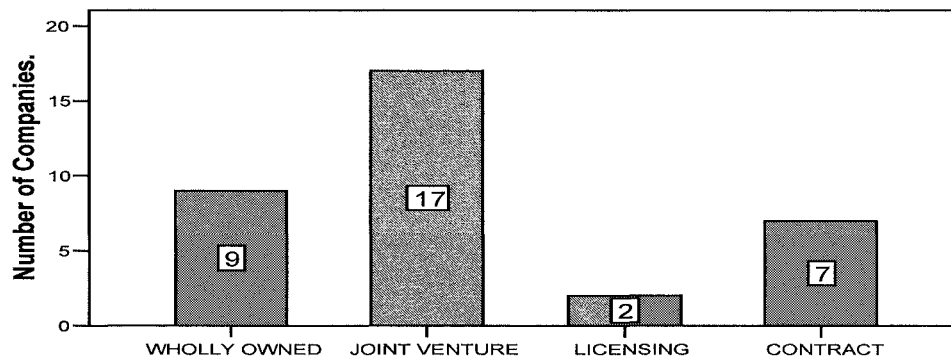


About 80% of the FOCs indicated that, based on their experience of the Libyan business environment, it is crucial to have a local partner when investing in Libya. Accordingly, about 50% of the FOCs respondents operated in a joint venture mode in Libya, as shown in figures 6.6 and 6.7.

**Figure 6.6: The Importance of having Local Partner.**



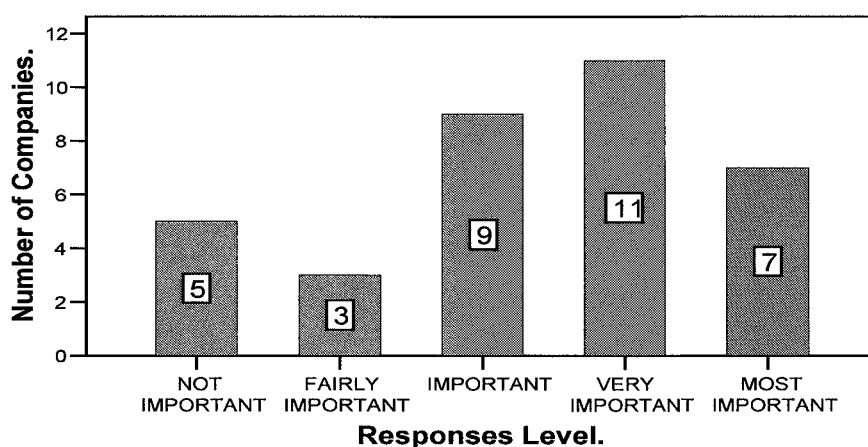
**Figure 6.7: Investment Mode.**



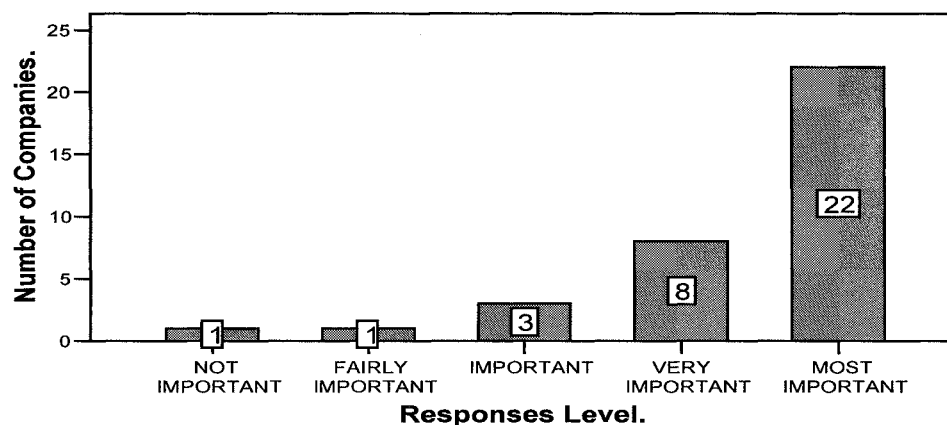
As figure 6.8 indicates the majority of foreign oil companies (FOCs) respondents pointed out that market size is important. This factor is therefore an important consideration in attracting FDI inflows into the Libyan market. On the contrary, 8% of the respondents indicated that market size is only fairly important. As indicated by Balasubramanyam and Mahambare (2003), market size is one of the factors

determining FDI in India. Makola (2003), also cited limited market size as leading to primary problems affecting FDI inflows. The Global Business Policy Council (2004) similarly pointed out that investors favour China rather than India due to its market size. Finally, Halicioglu (2001) found that Turkey's market size has had an effect on EU investment.

**Figure 6.8: Market size.**



From figure 6.9 it can be seen that 86% of respondents indicated that the proven Libyan oil reserves were the most important factor determining FDI inflows into the Libyan oil sector.

**Figure 6.9: Proven of Oil & Gas Reserves.**

There are many classes and grades of oil and higher grades attract better prices in the international market. Figure 6.10 demonstrates that oil quality is significant in terms of attracting FDI into the Libyan oil sector. The quality of Libyan oil is amongst the highest in the world, and commands higher prices compared with oil from MENA countries (OPEC, Annual Statistical Bulletin 2003).

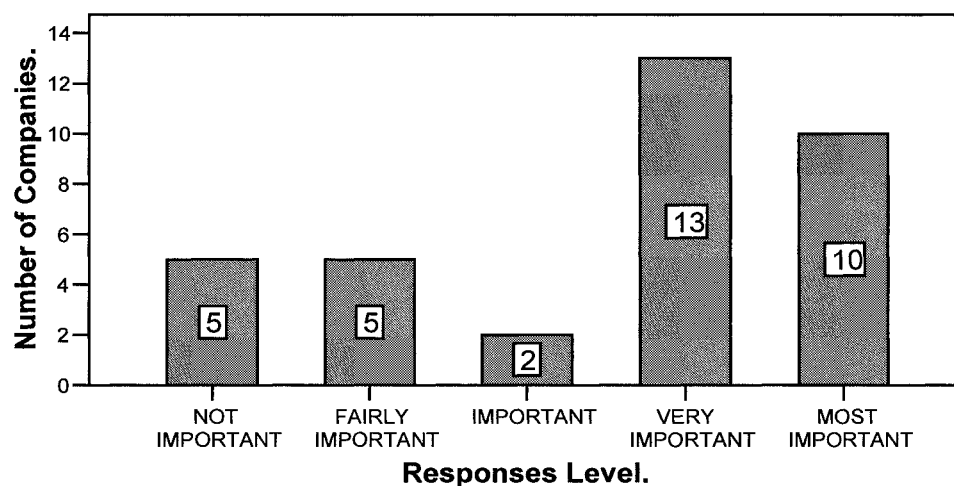
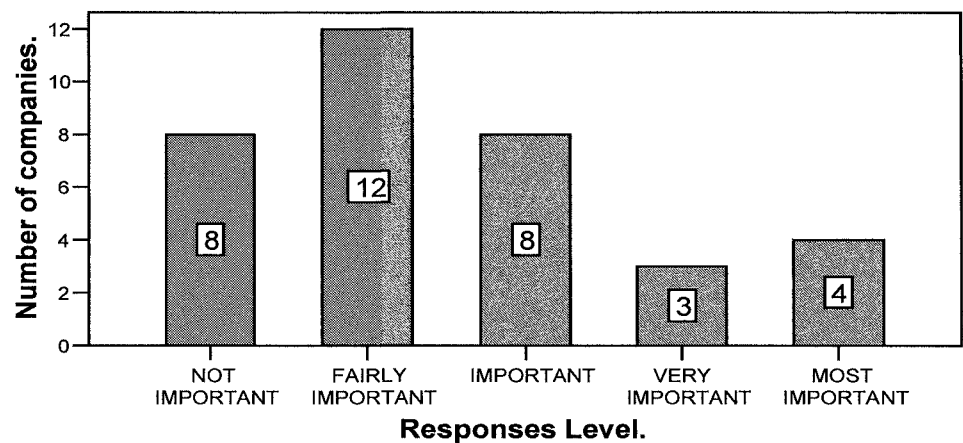
**Figure 6.10: Quality of Oil.**

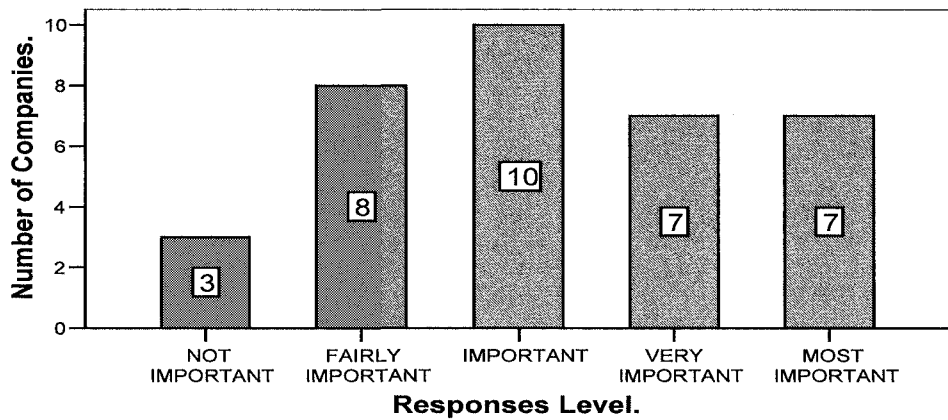
Figure 6.11 shows that for 60% of respondents the low cost of local Libyan labour was not a significant reason for FDI inflows. Usually FOCs come to host countries with all of the staff needed for their activities.

**Figure 6.11: Low Costs of Labour.**



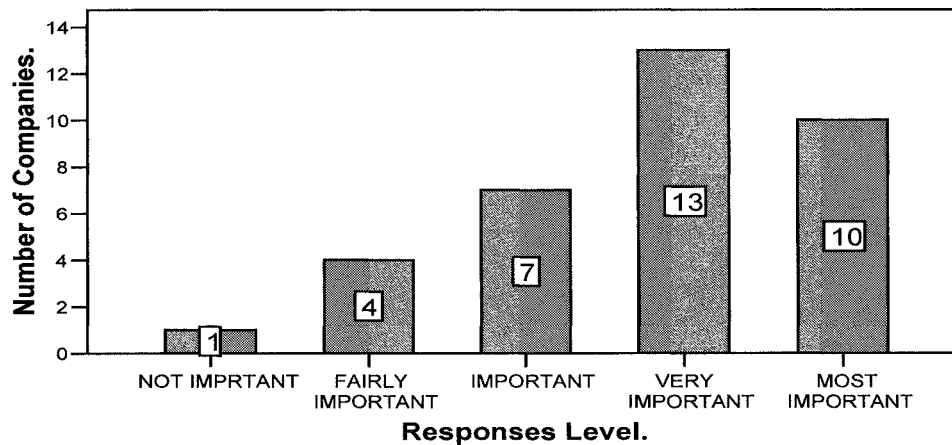
About 91% of FOCs questioned indicated that lower extraction costs of Libyan oil was a reasons for their investment in the Libya market, as figure 6.12 demonstrates. Moreover, these results support the views of the NOC which pointed out that Libyan extraction costs are among the lowest in the world.

**Figure 6.12: Lower Extraction Costs.**



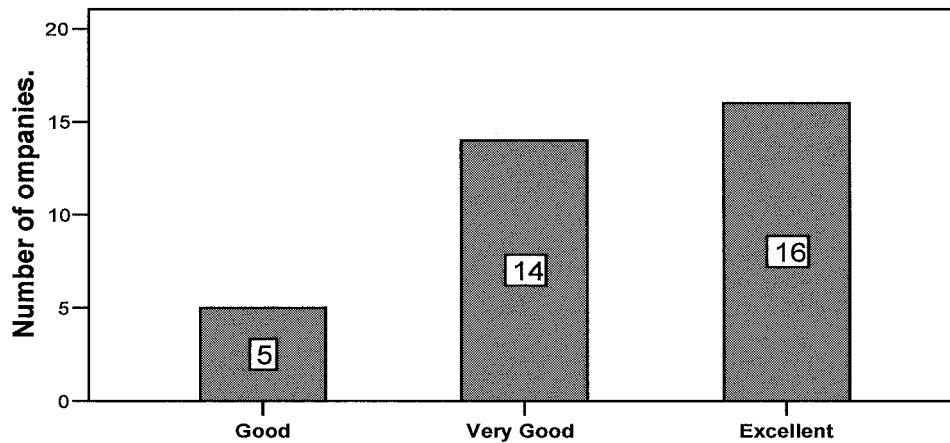
Despite more than half a century having elapsed since the first oil discovery, Libya is still virgin land and more than three-quarters of the country has not been explored. 30 FOCs indicated that the Libyan oil market had a huge oil and gas potential. The respondents also mentioned that the Libyan market is new and needs a lot of FDI in the oil sector, and this was one of the strongest factors attracting them to invest in Libya, as figure 6.13 shows.

**Figure 6.13: Unexplored Country.**



All respondents were asked to give their perceptions regarding safety and security while working in Libya. Figure 6.14 shows that all respondents were satisfied with the levels of safety and security provided by the Libyan government. According to Hausmann and Fernández-Arias (2000) there is a strongly statistically negative relationship between country risk and total capital inflows. Riskier countries get less capital. Gandhi (2002) indicated that an important factor determining FDI inflows into India is the political and economic situation. The nuclear tests by India and Pakistan, the deployment of troops at the borders of the two countries, terrorist attacks in India tend to scare away foreign investors.

**Figure 6.14: Security Provided by the Libyan government for FOCs.**

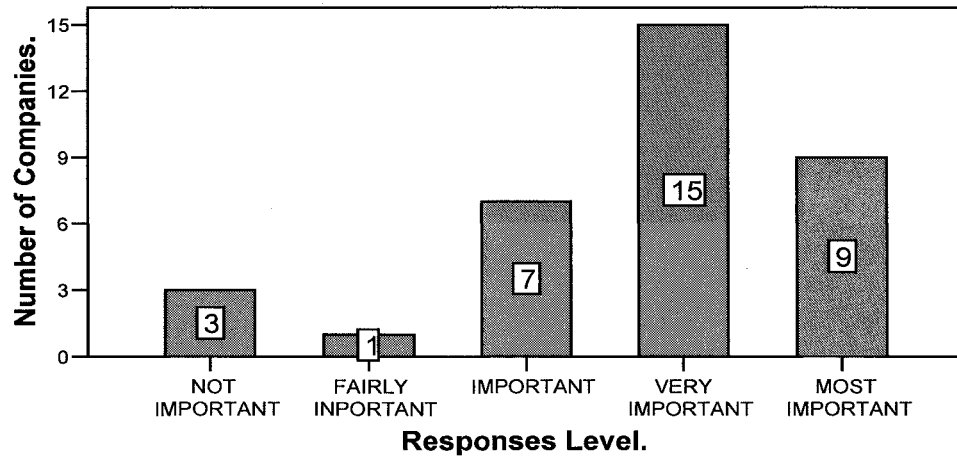


Is being far away a problem? To study this question Hausmann and Fernández-Arias (2000) looked at the distance of a country to major world markets. They found that distance is negatively related to total capital flows. This is because geography is a crucial determinant of the origin of FDI developing countries.

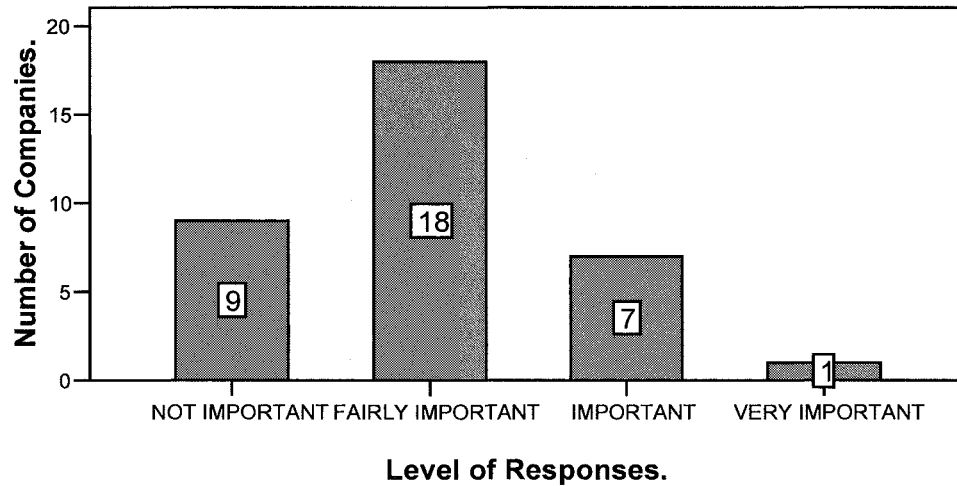
As Figure 6.15 illustrates, about 31 out of the 35 FOCs questioned thought that Libya's strategic position in relation to the industrial EU countries was significantly important. Therefore, this factor attracted FDI inflows to the Libyan oil sector.

According to Davidson (1979) FDI location decisions are thought to be influenced by country specific variables such as geographical proximity.

**Figure 6.15: Geographical Proximity.**

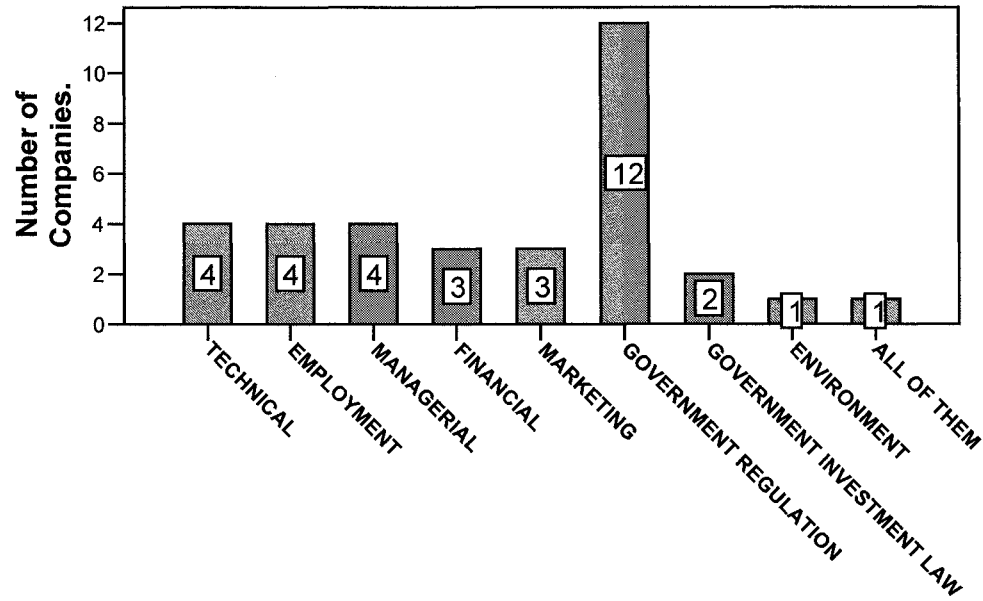


**Figure 6.16: Attractive of Local Investment Policy.**



As Figure 6.17 shows, the most difficult obstacle facing foreign investors was government regulations and government intervention in the investment decision-making process in the FDI environment. another obstacle facing foreign investors were technical issues, including IT infrastructure, telecommunications, and the availability of spare parts, In addition, there are employment obstacles such as a lack of skilled and professional employees. These results support those of (Salam, 2003).

**Figure 6.17: The Main Difficulties Facing Foreign Investors.**



For more results obtained from the questionnaire analysis (see the Appendix 13).

From the analysis of the questionnaire responses, suggestions can be made for promoting FDI inflows to the Libyan oil sector as follows:

A detailed feasibility study should be conducted including the technical and economic aspects of proposed projects.

1. All potential obstacles should be removed that might hamper the enforcement of law concerning the engagement in economic activities, and other related laws and regulations. This can be achieved by reviewing, amending and simplifying the rules and directives associated with economic activities in general and private sector activities in particular, in such a way that these laws become clear and simple.



3. The financial sector should be restructured and the banking activities reorganised to give brokers a new role. This can be achieved by adopting international approaches in organisation, performance, control and transaction processes in order to promote competition among the different financial organisations. This could reduce the costs of financing and work towards the promotion of prevailing global methods.
4. Exemption policies can be continued by exempting new projects from taxes on profits. Land should be made available for national and foreign investors, besides providing other services, so that they can be persuaded to invest in the regions allocated for investment.
5. Protection guarantees can be enhanced by reviewing the bilateral and regional agreement with neighbouring and friendly countries, making use of these agreements in the areas of investment and trade.
6. Work towards establishing suitable terms may motivate foreign capital to contribute to the investment process by engaging in joint ventures through the enforcement of Law no 5 concerning foreign capital, by providing the required guarantees. This can be achieved by the government making a formal declaration confirming the stability of its policies and laws related to investment.
7. The state can also work towards signing agreements with certain countries, including the possibility of involving international banks to secure the rights of investors to transfer their assets in cash or in kind.
8. The media should have a role in educating the general public, making them aware of the new role of the private sector in the development process and in promoting joint ventures involving private and foreign investment.

9. Brokers and commercial agents should be encouraged to coordinate producers and consumers, and regularly reviewing marketing policies and introducing suitable amendments to cope with market requirements and conditions.
10. A strong government body needs to be established to attract and deal with FDI. The main aim of this body would be to help in conducting feasibility studies, providing technical and marketing information and training and rehabilitation processes.
11. Work towards establishing industrial regions and free zones should begin by building the required infrastructure, such as telecommunications, transport, hotels and other utilities that provide quality services.
12. Travel, transportation, and emigration for foreign employers should be facilitated.
13. Levels of transparency could be increased between the government and foreign companies.
14. Import restrictions could be reduced, prices deregulated, and procedures for starting business might be simply.
15. Entry barriers should be removed, especially where government enterprises have dominated all markets and where restrictions on private participation and entry were powerful.
16. Full insurance system should be established to enhance the trust of foreign investors.

### **6.3.2 Interview Results**

Face-to-face interviews were conducted with 20 Libyan officials and government representatives, including seniors' staff in Ministries, banks, universities, investment organisations, the national oil corporation and Libyan oil companies.

During the two fieldwork visits to Libya, the collection of this data proved to be very problematic and time-consuming. To get data and information from foreign and national companies was not easy, as the subject could be regarded as a sensitive issue, especially the questions about capital investment.

The results of the survey show that the interviews highlighted the main weakness and the strengths of the Libyan foreign investment environment. From the interview survey analysis the most important discussion points and suggestions were as follows:

- 1- Enhancing the open door policy in order to attract more FDI inflows to Libya.
- 2- Enhancing the knowledge about the importance of FDI inflows to local people, and stressing its importance to economic development.
- 3- Until now, the government has emphasised the importance of attracting FDI inflows into the oil sector, but it should encourage FDI inflows to other Libyan economic sectors such as tourism, banking and services.
- 4- Reviewing and updating the structure of the banking sector and introducing financial incentives to build trusts for foreign investors.
- 5- Establishing advanced monetary markets, and introducing new investment tools.
- 6- Providing modern investment maps of Libya on a regular bases, to foreign investors.

- 7- Expanding and modernizing specialised information centres for foreign investors in Libya.
- 8- It is very important to focus on re-establishing strong national media in order to advertising and introducing the attractiveness of the new Libyan foreign policy to external investors.
- 9- Diversifying the of national income and reducing its dependency on oil as the country's sole source of income.
- 10- Work towards funding and providing loans to small industries and promising projects.
- 11- Improve the level of transparency between the government and foreign companies. This has been proved to be a most important factor for attracting domestic and foreign investors.
- 12- Continuation of survey and exploration of natural resources such as minerals, resources, and the semi-manufactured products and raw materials.
- 13- Ensure that infrastructure and other basic facilities meet international standards.
- 14- A consistent legal framework for FDI should accompany measures to expand markets and provide a competitive environment.
- 15- Focus on reducing the pollution effects of the companies' investment in the oil and gas sector.

**Table 6.4: Summary of the Interview's Suggestions.**

<b>Factor</b>	<b>Number of Interviewees</b>	<b>Percentage (%)</b>
Enhancing open door policy.	20	100
Improve of infrastructure and IT technologies.	20	100
More R&D and training with local companies and transfer higher and needed technologies.	20	100
Further survey and exploration should be conducted of all natural resources.	16	80
More facilitates to foreign investors (inter, tax, administrative process, and regulations).	19	95
Economic reformed.	18	90
Updated the structuring of banking sector and financial incentive to build trusts for foreign investors.	20	100
Pollution Concerns.	17	85
Include more sectors such tourism, and services in the FDI programmes.	16	80
Comparing with the neighbouring countries, Libya should speed up FDI process.	18	90

## **CHAPTER SEVEN**

### **EMPIRICAL FINDINGS: ANALYSIS AND INTERPRETATIONS.**

#### **7.1 Introduction**

Host countries are trying hard to attract more inward foreign direct investment (FDI). Almost all host countries have barriers to FDI inflows, and greater or less transparency. At the same time, many governments offer explicit and implicit incentives to foreign owned companies to establish affiliates in their host markets. Numerous theoretical arguments have been offered for and against barriers to FDI inflows; however, the empirical evidence on the impacts of such policies, as well as on their removal, is surprisingly limited and inconclusive given the huge literature on the determinants of FDI. The policy directions taken by countries over the past three decades have generally been to liberalize restrictions or barriers, in order to attract FDI inflows.

The main aim of this chapter is to identify and analyse the economic factors effecting FDI inflows to the Libyan oil sector. The chapter consists of four parts: first, a review of the determinants of FDI in previous studies which might affect FDI in the Libyan case. Second, a discussion of the effects of economic factors on FDI inflows to the Libyan oil sector during 1962-2003. The third part consists of methodological techniques, description of the data and the results of analysis. This is followed by a summary of the main findings.

## **7.2 Model Variables**

There are no certain economic factors in the literature which influence the flow of FDI. Different studies reveal different factors. This is mainly due to the fact that development conditions are specific to each country. Different types of FDI are also dependent on different factors. There is an extensive and controversial literature on the economic and socio-political determinants of FDI which has presented a variety of results with both positive and negative correlations between FDI and its determinants in the host country (Singh et al, 1995, Oleksiv, 2000). Most previous studies have analysed a number of macro economic factors, such as GDP, exchange rates, the extent of openness, infrastructure level, government spending, and interest rates (Erdal, 2002). Country risk as a composite risk has also been negatively correlated with investment decisions and the expected returns on investments (Meldrum, 2000). Likewise, one has to take into account the difficulties associated with the measurement and accuracy of data concerning certain types of factors. Published empirical research in the economics literature shows that FDI in different countries has been influenced by factors such as the GDP, government spending, natural resources, factor costs, fiscal incentives, local infrastructure, interest rates, economic and political stability, and internal investment policy.

The following analysis provides a background to the present study's original economic modelling of FDI inflows which was described in the analysis of the Libyan economy. The focus then shifts to assessing the relative significance of the factors that may attract FDI via a panel data regression analysis for a sample covering the study 1962-2003. This provides a broad overview of FDI inflows patterns to Libya over the post-oil

discovery period and draws some preliminary inferences about the influence of existing restructuring policies on FDI inflows. An additional aim of this chapter is to present and analyse the theoretical/empirical findings on Libyan FDI inflows.

### **7.2.1 FDI inflows (FDI)**

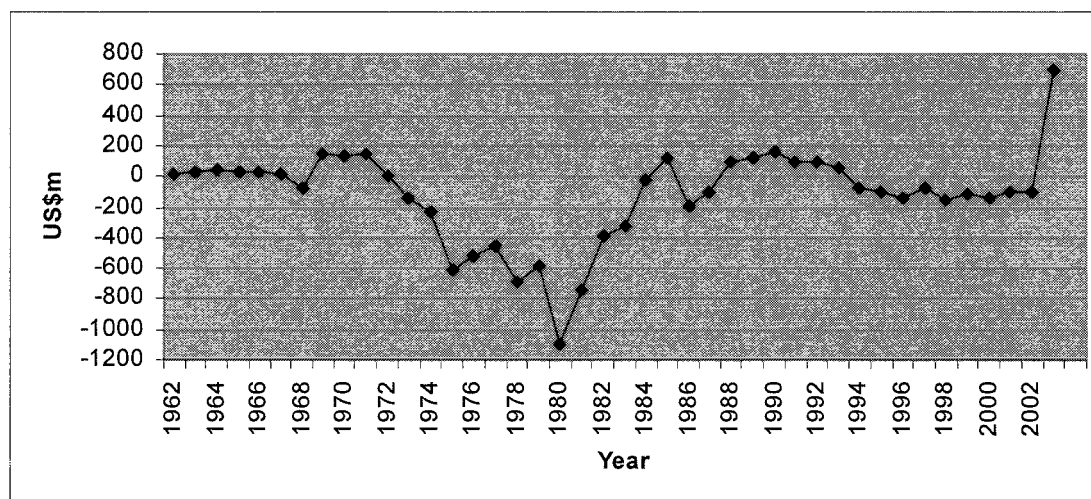
Libya has a lower share of FDI compared to other Arab countries. The value of FDI inflows to Libya has revealed a downward trend. It follows that the trend can be modelled, taking into account a number of factors which, amongst other things, are concerned with the improvement of the country's investment climate, implementation of more attractive policies, and increasing the speed of reforms. A regression was run for the last 41 years (1962-2003) to ascertain the factors that could affect the inflows of FDI to Libya, keeping in mind previous studies as discussed earlier. Different explanatory variables have been used to analyse their attributes in affecting the inflows of FDI to a host country.

From figure 7.1, it can be seen that the FDI inflows to the Libyan oil sector have varied consistently in terms of the absolute current US dollar values of the real (inflation-adjusted) value of FDI over the time. The year-to-year rate of growth has obviously varied but, in general, it has substantially decreased in the 1970s and 1980s. However, given the very low base from which the FDI series started in 1962, relatively rapid rates of growth can be expected in the year 2003.



In the period of post-UN's sanctions, FDI inflows into the country reported a healthy growth as a result of the macroeconomic stabilization achieved, the improved investment climate and the accelerated privatization effort.

**Figure 7.1: FDI Inflows to the Libyan Oil Sector.**



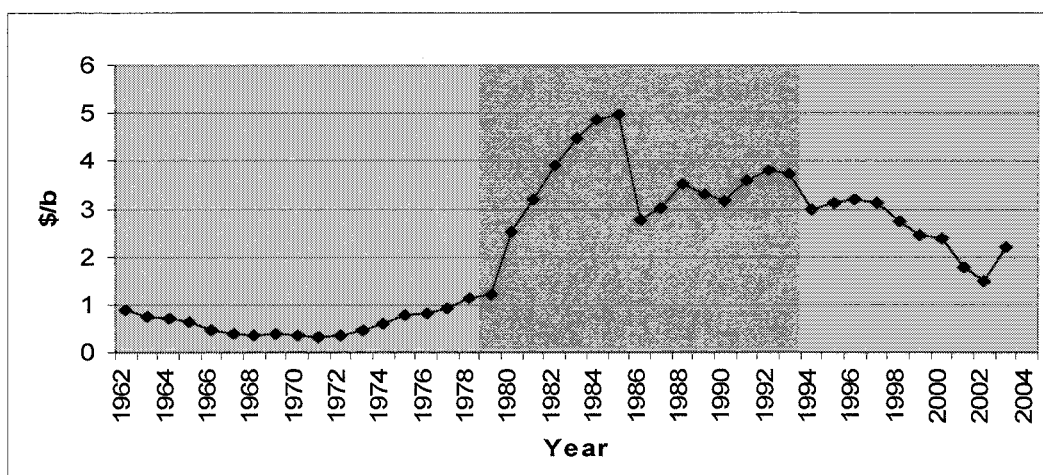
Sources: IMF, International Financial Statistics Yearbook 1981, 1992 & 2003. UNCTAD, 2003.

### 2.1.1 Extraction Cost (OILC)

The average extraction costs per barrel for the Libyan oil sector, including the depreciation of support equipment and facilities and the depreciation of capital expenditure, for the period before 1962 until 2003, ranged from \$0.32700 to \$4.97205, as figure 7.2 shows.

Crude oil production costs per barrel have shown a steady increase and have exceeded \$3 since 1981 (excluding 1986), reaching \$5 in 1985. These levels of extraction costs are high compared with an approximate cost of \$0.45/b in 1973.

**Figure 7.2: Extraction cost of crude oil per barrel,**



Sources: Bakar, September 1999: 238. NOC, Spring of 1999:4.

The Libyan extraction costs are one of the lowest in the world. Libya produces high quality low-sulphur or 'sweet' crude oil at costs of as low as US\$1 per barrel from some fields (Libyan investment, 2000)

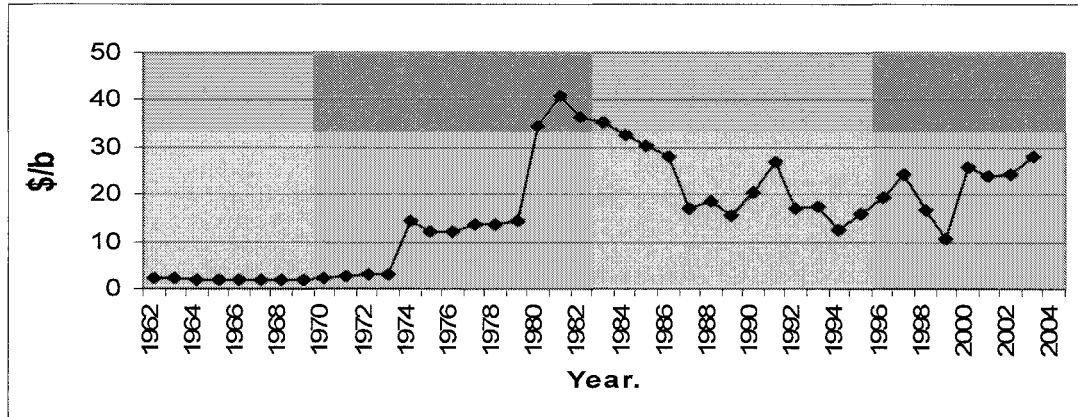
According to Davidson (1979) that FDI location decisions are thought to be influenced by a country specific variables such as input cost.

### 2.1.2 Libyan Oil Prices (OILP)

Oil export revenues account for over 95% of Libya's hard currency earnings (and 75% of government receipts). These revenues were severely hurt by the dramatic decline in oil prices during 1998, as well as by reduced oil exports and production as a result of US and UN sanctions (see Fig 7.3). With higher oil prices since 1999, however, Libyan oil export revenues have increased sharply, to \$18.1 billion in 2004 and a forecast \$19.4 billion in 2005, up from \$5.9 billion in 1998. Libya produces high quality low-sulphur or 'sweet' crude oil. These higher quality indicators

reflected higher prices in the world energy market, as illustrated in Table 7.1 (OPEC, 2004).

**Figure 7.3: Libyan Oil Prices, in \$ per barrel.**



Sources: OPEC, Annual Statistical Bulletin 1980, 1992 & 2004.

**Table 7.1: Crude oil prices by selected countries, \$/barrel (1970-2003).**

Year	Libya	Saudi Arabia	Iran	Nigeria	Indonesia	Venezuelan	Average
1970	2.09	1.35	1.36	2.10	1.67	2.05	1.77
1975	11.98	10.46	10.67	11.80	12.60	11.00	11.42
1980	34.50	26.00	30.37	29.97	27.50	25.20	28.92
1985	30.15	29.00	28.00	28.00	29.53	27.88	28.76
1990	20.40	18.40	18.20	21.20	18.55	24.69	20.24
1995	16.05	16.63	16.18	16.15	16.95	16.57	16.42
2000	25.85	24.78	24.63	25.85	24.15	24.85	25.02
2003	30.40	27.39	30.40	30.40	35.03	30.25	30.65

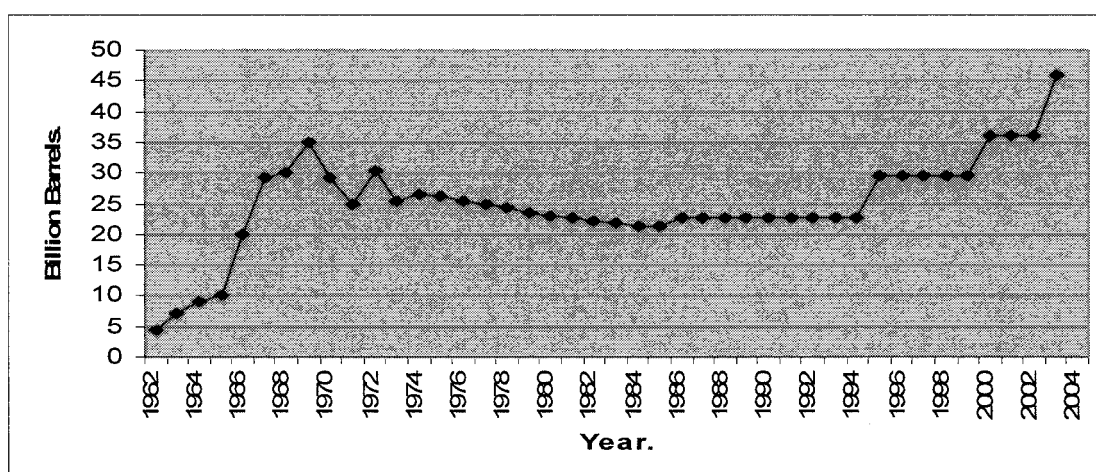
Source: OPEC, 1992 and 2004.

### 2.1.3 Libyan Proven Crude Oil Reserves (OILR)

According to the Oil and Gas Journal, (2003) Libya has total proven oil reserves of 46 billion barrels (see Fig 7.4). The country has 12 oil fields with reserves of 1 billion barrels or more each, and two others with reserves of 500 million-1 billion barrels. However, Libya remains "highly unexplored" according to Wood

Mackenzie Consultants, and has "excellent" potential for more oil discoveries. In addition, despite years of oil production, only around 25% of Libyan land is covered by agreements with oil companies. The under-exploration of Libya is due largely to sanctions and also to stringent fiscal terms imposed by Libya on foreign oil companies (eia, Libya, 2005). Also Libya has the biggest reserves of crude oil in Africa of 46 billion barrels (OPEC, 2003).

**Figure 7.4: Libyan Proven Crude Oil Reserves.**



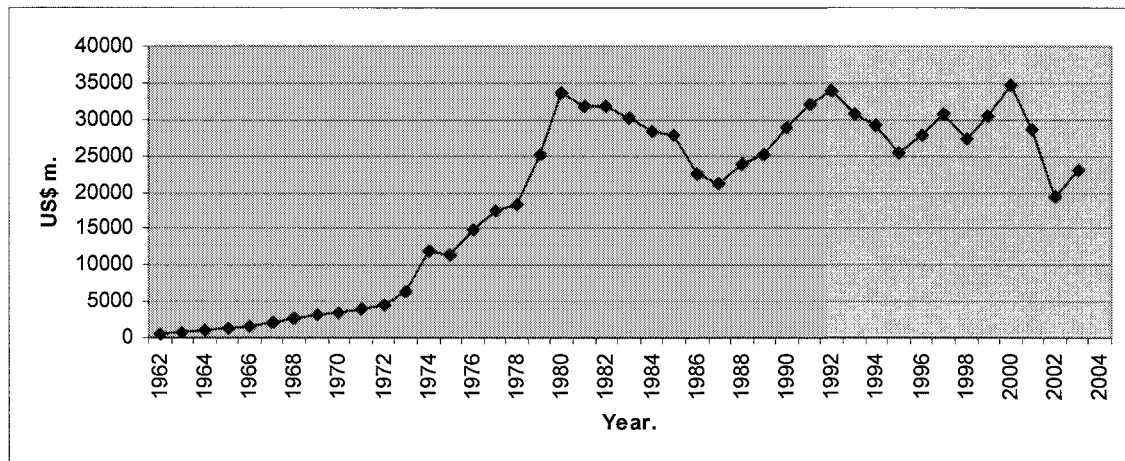
Sources: OPEC, Annual Statistical Bulletin 1980, 1992 & 2003.

According to Dunning (1973, 1981) resource endowments of host countries including natural resources and human resources maybe considered as important in the investment decision of foreign firms.

### 2.1.4 Libyan Real GDP

Primarily due to higher oil export revenues, Libya experienced strong economic growth during 2003 and 2004, GDP estimated have grown by about 9.8% and 7.7%, respectively. (EIA, Libya, 2005).

**Figure 7.5: Libyan Real GDP, in \$m.**



Sources: OPEC, Annual Statistical Bulletin 1980, 1992 & 2003.

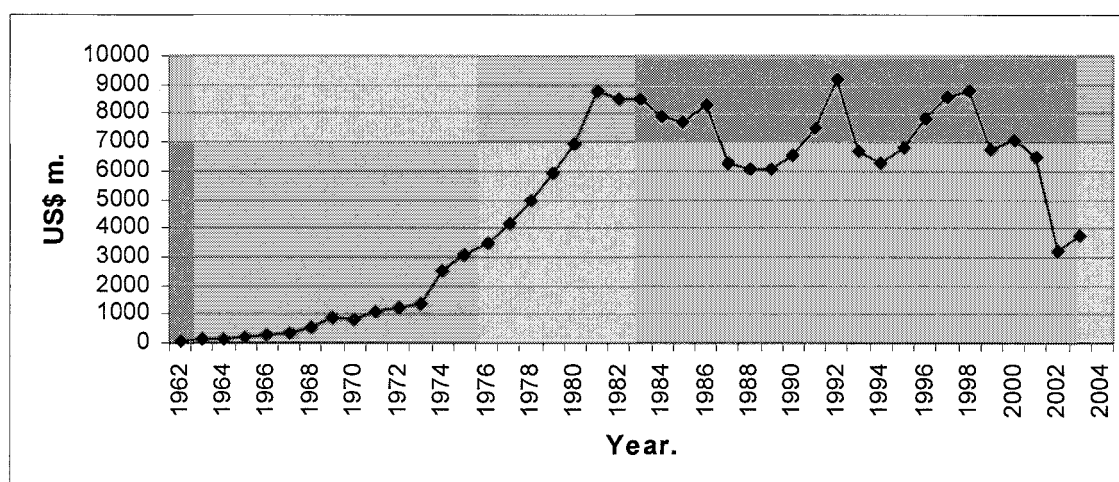
According to Dunning (1973, 1981) host countries with sizeable domestic markets, measured by GDP per capita and sustained growth of these markets, measured by growth rates of GDP, attract relatively large volumes of FDI

### 2.1.5 Libyan Government Spending (GS)

The decline in oil revenues caused the Libyan government to revise its somewhat haphazard way of making economic policy decisions, because it no longer possessed the financial resources to achieve many of its goals (see Fig 7.6). Thus, during the

early and mid-1980s, development projects were subjected to a more rigorous cost and benefit analysis than during the easy money time of the 1970s.

**Figure 7.6: Government Spendings, in US\$m.**



Sources: Central Bank of Libya, various issues. AMF, Arab Monetary Fund, 2000.

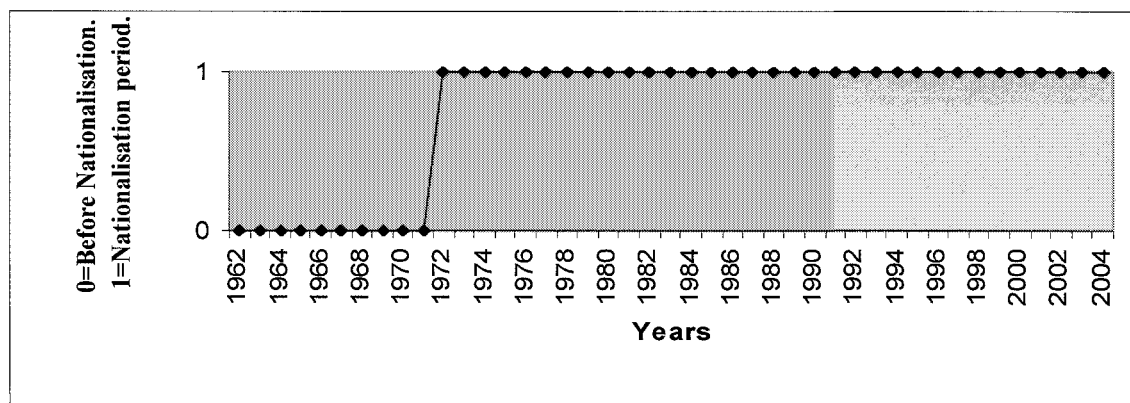
Government policies can indirectly influence the attractiveness of the host country to foreign investors by conditioning key supply- and demand-side factors. Virtually all the factors mentioned are susceptible to host government influence. For example, public investments in infrastructure could help promote FDI across a range of industries by reducing transportation costs within the host country as well as between the host country and potential export markets. Productivity levels in host country industries are potentially affected by a wide array of government policies — including expenditures on education and training, the enforcement of antitrust laws, and sensible monetary and fiscal policies.

According to Dunning (1973, 1981) infrastructure facilities including transportation and communication net-works are an important determinant of FDI.

### 2.1.6 Nationalisation of Foreign Oil Companies (NAT)

In 1972, the Libyan government announced the nationalization of a controlling interest in all other petroleum companies operating in the country (see Fig 6.7). This step gave Libya control of about 60% of its domestic oil production by early 1974, a figure that subsequently rose to 70%. Total nationalization was out of the question, given the need for foreign expertise and funds in oil exploration, production, and distribution.

**Figure 7.7: Nationalization of foreign oil companies.**



The potential influence of domestic government policies (such as nationalisation) on FDI inflows should be considered in the context of the general literature on the determinants of FDI inflow. In order to isolate the role of government policies, it is necessary to hold constant the various factors that might influence FDI inflows. A survey of the empirical literature on the determinants of FDI was therefore undertaken. This had two purposes: to identify the various general factors that

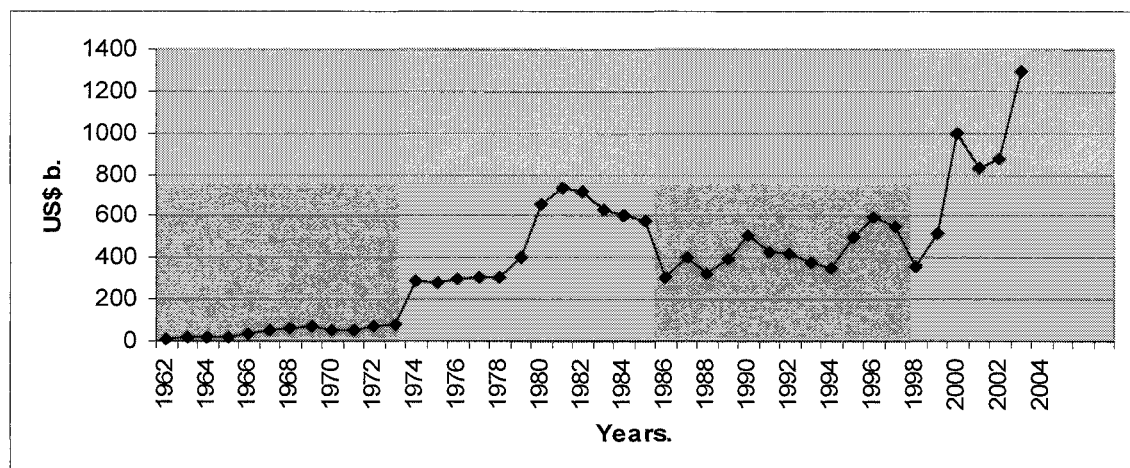
condition FDI inflows, and to identify the specific ways in which government policies affect FDI inflows.

### 2.1.7 The Country Wealth (CW)

The measurement of the wealth of the country is the outcome of a calculation of the net present value of Libyan proven crude oil reserves.

Figure 7.8 illustrates that, in the 1960s the country was lower wealth because of lower proven crude oil reserves and lower world prices for oil. In the 1970s, more exploration was undertaken and more FOCs entered the country, and therefore more oil was discovered in Libya. World oil prices were also higher. Higher expected levels of national wealth are assumed to attract more FOCs.

**Figure 7.8: The Country Wealth, in US\$ billion (1962-2003).**



Sources: OPEC, Annual Statistical Bulletin 1980, 1992 & 2003.



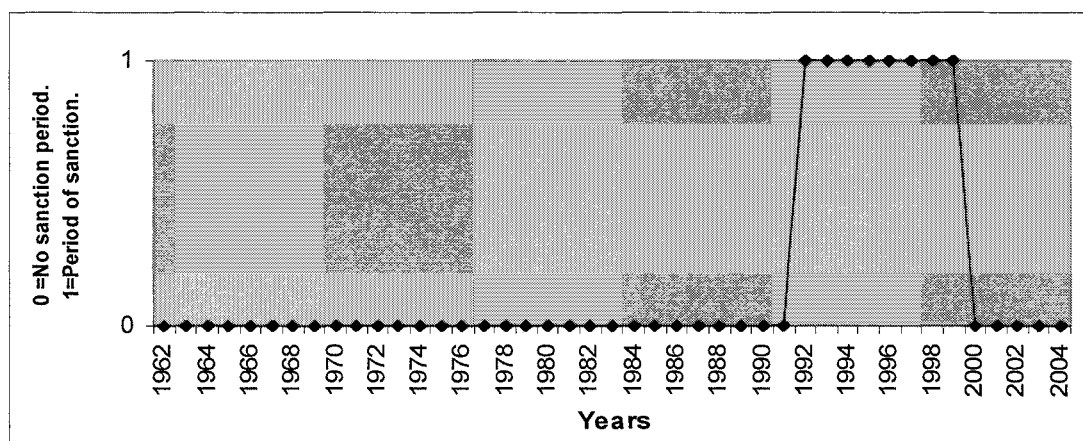
### 2.1.8 UN Sanctions (1992-1999) (SAN).

The first actual sanction was imposed by the US oil companies group started in 1982. These sanctions were followed by the UN economic sanctions in 1992 which lasted until 1999 (see Fig 7.9).

According to Altsean (2003) the general decline of foreign direct investment (FDI) was due to the unfavourable business climate created by the Sanctions. Moreover, Davidson (1979) points out that FDI location decisions are thought to be influenced by country specific variables such as tariff and barrier to trade (i.e. sanction).

As relations with Libya are normalized, the opportunities for investment in every area of the oil sector will be greatly enhanced, and inward investment already visibly growing is expected to surge (Libyan Investment, 2003).

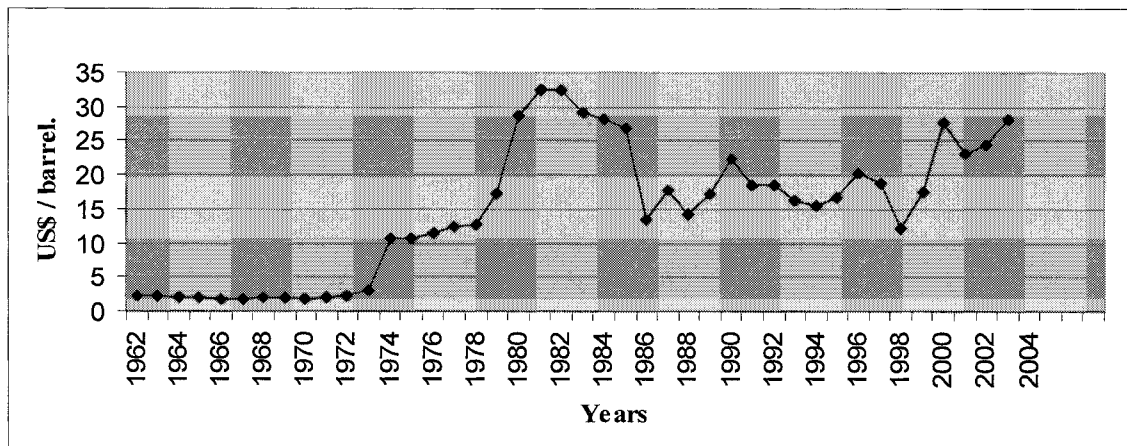
**Figure 7.9: UN Sanction period from 1992-1999.**



### 2.1.9 World Crude Oil Prices (WP).

Crude oil prices shows in Fig 7.10, behave much the same as any other commodity, with wide price swings in times of shortage or oversupply. The crude oil price cycle may extend over several years responding to changes in demand as well as OPEC and non-OPEC supply.

**Figure 7.10: World Oil Prices, in US\$ per barrel (1962-2003).**



Sources: OPEC, Annual Statistical Bulletin 1980, 1992 & 2003.

## 2.2 Time Series Analysis

Until recently econometricians paid little attention to the dynamic structure of time series. They had assumed that most time series data are non-stationary, and therefore, increased over time with non-constant variances. However, they have no effect on the empirical analyses. It was a great blow to traditional econometrics, when several time series based studies showed that statistics such as the  $t$  values, DW statistics, and measures of R-squared and F-statistics did not retain their conventional characteristics in the presence of non-stationary data. By definition, a series is referred to as a stochastic

process whose characteristics are expected to change over time. In other words, such time varying series exhibit non-constant variance.

Moreover, these time series studies proved that running regressions with such data could produce spurious results (i.e. results which erroneously indicate, through misleading values of such statistics, that a meaningful relationship among the regression variables exists).

One consequence of such discoveries is that it has now become a common practice to test for non-stationarity of economic time series data prior to any econometric estimation. Thus, stationarity is an important characteristic of the stochastic processes that we attempt to model. In the case of economic time series, as will be shown later on, first differencing would generate stationarity variables. However, as pointed out by Engle and Granger (1987), although first differencing may induce stationarity, first differenced regressions can also filter out long run information when the variables in levels are cointegrated. By definition, variables are said to be cointegrated if they exhibit long run relationship.

The process of arriving at stationarity is referred to as unit root test for non-stationary series. The unit root test proposed by Dickey-Fuller (1979) for stationarity postulates that most macro variables move over time with a non-constant variance, making modelling a difficult task. Assume a variable  $X$  being modelled against time as:

$$X_t = a + b t + u_t \quad (7.1)$$

$$\text{where } u_t = \rho u_{t-1} + \varepsilon_t \quad \varepsilon_t \sim \text{NID}(0, \sigma^2) \quad (7.2)$$

Substituting (7.2) into (7.1) and re-arranging gives the reduced form expression:

$$X_t = \alpha + \beta t + \gamma X_{t-1} + \varepsilon_t \quad (7.3)$$

In expression (7.3) if  $\gamma=1$ , then  $X$  is said to be stationary of order 1 [i.e.  $X \sim I(1)$ ] that is:

$$\Delta X_t = \varepsilon_t \quad (7.4)$$

With  $\varepsilon_t$  being a white noise error term,  $\Delta X$  will be a random walk variable with a finite variance. For any value of  $\gamma$  less than unity,  $X$  will be stationary; while any value of  $\gamma$  greater than unity will lead to an explosive variance of  $X$ .

The augmented Dickey-Fuller (ADF) test, on the other hand, tests the hypothesis that, in the general model,

$$\Delta X_t = \alpha + \beta t + \sum \gamma_i X_{t-i} + \varepsilon_t \quad (7.5)$$

$\gamma_i = 1$  for every lag of  $X$ .

In short, in the DF test the first difference of a variable is regressed on its own lag level, in addition to a drift and a deterministic time trend, if required. In the ADF test lags on the dependent variable are included to ensure white noise errors. The test statistic in the DF and the ADF procedures is calculated in the same way as a t-ratio. However, due to the presence of non-normality, the corresponding critical values are not exactly t-distributed, and hence have been calculated and offered in Fuller (1976).

The concept of cointegration follows from stationarity. Assume that there are two variables,  $X$  and  $Z$ , each being stationary of order 1. If there exists a linear combination so that

$$Z_t = a + b X_t + e_t \quad e_t \sim \text{NID}(0, \sigma^2) \quad (7.6)$$

Then  $X$  and  $Z$  are said to be cointegrated of order 1. In this case as developed by Engle and Granger (1987), a test for the presence of cointegration is performed by simply running an OLS regression of  $Z$  on  $X$  and subjecting the residual of equation (7.5) to a unit root test. In effect the cointegration test also involves a process of error correction.<sup>1</sup> In general, variable  $Z$  could be regressed on  $k$  variables, producing a vector of  $k$  coefficients, better known as vector cointegration. In the spirit of Granger causality, the cointegrating equation may not be unique; that is other variables could also be regressed on  $Z$  and produce cointegrating equations. Following Hall (1986) and McMillin (1991), the optimal cointegrating equation is the one which maximizes the adjusted R-squared. The variables in question are said to be cointegrated if these residuals prove to be stationary. The residuals can then be tested using the DF and ADF tests procedure.

#### 7.4 Econometric Model and Data

The primary source of data in the present study is the Libyan Central Bank through its various periodic publications looking into the stationary and non-stationery of the macro-economic time series data covering the forty-two year period between 1962 and 2003. Based on data for the specific Libyan economy, a regression was run to investigate which factors could affect the FDI inflows to the Libyan oil sector. Different explanatory variables may be used in studies of FDI, comprising a shopping list of variables (Dunning, 2001).

$$\text{FDI} = f(\text{RGDP}, \text{OILC}, \text{OILP}, \text{OILR}, \text{GS}, \text{CW}, \text{NAT}, \text{SAN}) \quad (7.7)$$

where:

- 1- FDI is foreign direct investment inflows to the Libyan oil sector
- 2- RGDP = real gross domestic product in real terms. This variable is used as a proxy for market size. Data for GDP at 1980 average prices is used.
- 3- OILC = Average cost of production of crude oil per barrel.
- 4- OILP = Libyan oil prices, reflecting the quality of Libyan oil in the world market.
- 5- OILR = oil reserves. These estimates improved over the period of study.
- 6- GS = government spending on domestic development projects. This variable is used as an indicator of how much money was spent in developing the country during the period of study in all infrastructure projects.
- 7- CW = country wealth. This was calculated by multiplying oil reserves and world oil prices.
- 8- NAT = nationalisation of foreign oil companies. This is a dummy variable taking the value of 0 for the period before the nationalisation policy implemented from 1962 till 1972, and 1 after 1972. It represents the change in the structure of the economic environment.
- 9- SAN = The UN sanctions. This dummy variable takes the value of 0 for the period before the sanctions implemented from 1962 till 1991; value of 1 from the year 1992 until 1999, and the value of 0 from 2000 on wards.

#### 7.4.1 Stationarity Test: (ADF) Augmented Dickey-Fuller Unit Root Test.

In order to test the stationarity of the data included in the model, the Augmented Dickey-Fuller Unit Root Test of non-stationarity was applied to the time series data in level and differenced forms to ensure that the regression results obtained were not spurious. The results are the equivalent of calculating t test in level (L), first Difference ( $\Delta$ ) and in second difference ( $\Delta^2$ ). If all variables exhibit I (1), the null-hypothesis of non-stationarity at the 1% significance level is rejected.

The tests on the time series data for FDI (at the current market prices), RGDP, GS, CW, OILC, OILR, OILP, NAT, SAN for Libya were carried out for the period 1962-2003. If the null hypothesis is accepted that a time series is non-stationary (has at least one unit root), then the procedures were re-applied after transforming the series into the first differenced form (as in Table 7.2). If the null hypothesis of non-stationarity (when the time series is expressed in first differenced form) can be rejected, it may then be concluded that the time series is integrated at the first order one I(1). The results are presented in Table 7.2.

**Table 7.2: The research variables and their stationary level.**

Research Variables	Level (L)	$\Delta$
Foreign direct investment inflows = FDI	-1.695	-6.409**
Real gross domestic product = RGDP.	-1.360	-4.753**
Government spending = GS.	-0.962	-7.741**
Country wealth = CW.	- 1.624	- 5.516**
Average oil extraction cost per barrel = OILC.	- 1.493	- 5.965**
Oil Reserves (OILR)	-1.888	-5.045**
Oil prices (OILP)	-1.687	-6.361**
Nationalisation of foreign oil companies = NAT.	- 1.6307	- 6.408**
Sanctions imposed = SAN.	-1.846	-6.120**

\*\* = statistically significant (4.198503) at the 99% confidence level.

The results of unit root test at the level and the first differences degree are presented in Table 7.2. The critical values of ADF can be computed using the algorithm of Mackinnon (1991). Critical values with constant and time trend and with constant but no time trend at 5% significant level has been reported by Eviews software 4.198503.

The results of the ADF tests indicated that all variables (dependents & independents) were non-stationary in their levels, but stationary at the first differences with a 99% level of confidence. First order stationarity implies that there may be a long run relationship between the variables.

#### 7.4.2 Cointegration Test.

All variables were tested using the Johansen Cointegration Test. The result suggested that there was no cointegration among the variables, which means that there is no long-run relationship between them. In addition, the results indicate no long run stability of the variables, which implies the existence of disturbances during the period of the study, such as the nationalisation of foreign oil companies which were implemented in 1972, followed by USA sanctions in 1982, and UN sanctions in 1992. Therefore, a short-run model should be used to estimate the equation which is exhibited in the form of Durbin equation model.

$$FDI = f(RGDP, GS, CW, OILC, NAT, SAN, FDI(-1)).....(7.8)$$

This equation shows that the independent variables as well as one-lag FDI [FDI(-1)] can jointly determine the current value of FDI.



The estimated coefficient of real GDP has turned out to be negative and statistically insignificant, indicating that over the period of study, GDP has not been a good determinant of FDI. The same appear to be for the estimated coefficient of oil extraction cost and government spending.

Table 7.3 shows the estimated general model shown as expressed in (7.8). Theoretically, these explanatory variables are expected to affect FDI inflows to the Libyan oil sector. However, the estimated findings suggested that some estimated coefficients have turned out to be either statistically insignificant or with negative signs.

**Table 7.3: First Estimation Equation of FDI and its explanatory variables.**

<b>Dependent Variable FDI</b>				
<b>Independent Variables</b>	<b>Coefficient</b>	<b>Std. Error</b>	<b>T-Statistic</b>	<b>Probability</b>
<b>Constant</b>	-165.8346	138.9575	-1.193419	0.2418
<b>RGDP</b>	-1.172784	1.006997	-1.164635	0.2531
<b>GS</b>	-0.009587	0.029257	-0.327688	0.7454
<b>CW</b>	0.477006	0.215642	2.212022	0.0345
<b>OILC</b>	204.6886	55.01681	3.720474	0.0008
<b>OILP</b>	-14.85664	7.780603	-1.909446	0.0655
<b>OILR</b>	9.404308	5.703389	1.648898	0.1093
<b>NAT</b>	-329.0328	113.5476	-2.897753	0.0068
<b>SAN</b>	-69.14309	104.2544	-0.663215	0.5121
<b>FDI(-1)</b>	0.480361	0.134569	3.569627	0.0012
$R^2 = 0.798$ Adjusted $R^2 = 0.747$ $N = 42$ $D.W = 2.6$ $F\text{-Statistic} = 15.811$ $Probability = 0.000000$				

Table 7.4 shows that all the estimated coefficients have turned out to be meaningful and significant. First, the estimated coefficient of NAT has influenced FDI inflows. During the implementation of nationalisation of FOCs since 1972, the country has lost nearly \$300 million worth of FDI every year.

The FDI one period lag is shown to be statistically significant, indicating that the lag-dependence of FDI on the general investment climate and business environment appears to be strong. The presence of one period lag in FDI can be explained by the fact that foreign investment is a strategic decision and is thus influenced more by general policy trends than any specific action in a particular year. The estimated coefficient of FDI(-1) shows that, other things being equal, a \$100 increase in the previous value of FDI would enhance FDI by \$82, in the current year.

**Table 7.4: Estimated Model II.**

<b>Dependent Variable FDI</b>				
<b>Independent Variable</b>	<b>Coefficient</b>	<b>Std. Error</b>	<b>T-Statistic</b>	<b>Probability</b>
<b>Constant</b>	23.36849	63.32639	0.369017	0.7142
<b>CW</b>	0.471778	0.131416	0.3589962	0.0010
<b>NAT</b>	-291.8893	96.08482	-3.037829	0.0044
<b>FDI(-1)</b>	0.819998	0.094642	8.664241	0.0000
$R^2 = 0.741$ Adjusted $R^2 = 0.720$ $N = 42$ $D.W = 2.35$ $F\text{-Statistic} = 35.34$ $Probability = 0.000000$				

Similarly the CW coefficient exhibits a statistically significant relations with FDI. The estimated coefficient of CW shows that, other things being equal, a \$100 increase in country wealth would enhance FDI by as much as \$47 per annual.

Finally, the effected of nationalisation is shows by the estimated coefficient of NAT in Table 7.4. This indicates a negative and highly significant relationship with FDI. In consideration of the findings from Table 7.3, and several runs for best fit, it can be argued that the main factors influencing FDI are CW, NAT and one-period lag of FDI, as indicated by model II.

**Table 7.5: White Heteroskedasticity Test.**

<b>F-statistic</b>	<b>Probability</b>
2.027527	0.098758

By using three stability measures: the Recursive Estimates Test (OLS only) through Recursive Residuals, the CUSUM Test and the CUSUM of Squares Test, it was found again that the model is stable.

### 7.4.3 Stability Test

$H_0$  = the model has no stability.

$H_1$  = there is stability.

**Table 7.6: Stability Test**

<b>F-statistic</b>	1.995850	<b>Probability</b>	0.151070
<b>Log likelihood ratio</b>	4.428031	<b>Probability</b>	0.109261

The hypotheses were tested using the Ramsey Reset Test for a stability measure. It was found that the model is stable, because the F-statistic is 1.9, with a probability is 0.15, which is not significant

Using the White Heteroskedasticity Test as a measurement of stability, the model was found to be stable, because the F-statistic is 2.027, with a probability is 0.098, which is not significant

#### 7.4.4 Normality Test

Part of the empirical study applied the Jarque-Bera (JB) normality test in order to assess if the conditional distribution of the observed series is normal.

**Table 7.7: Normality Test by using Jarque–Bera.**

Jarque - Bera	Probability
17.227	0.000182

Normality test based in Jarque–Bera indicates that normality can not be rejected at 1% level as indicated in Table 7.7.

#### 7.4.5 Elasticity Test: (Point Elasticity, E)

The estimated findings in both tables 7.3 and 7.4 are simple parameters and hence do not shows the extent of the responsiveness of changes in FDI. Using these estimated parameters, we can estimate point-elasticity for each independent variable in relation to FDI, as shown in the following model:

Elasticity = (estimated coefficient) \* (independent variable / dependent variable)

Table 7.8 gives the point elasticity for country wealth (CW) and nationalisation of FOCs (NAT) in selected years. For every year of international there has been 1.46% drop in FDI on average. Every 1% increase in CW there has been 1.18% increase in FDI on average.

**Table 7.8: Values of Point Elasticity for CW and NAT.**

Year	CW	NAT
1962	0.25	0.00
1965	0.36	0.00
1970	0.59	0.00
1975	0.21	-0.47
1980	0.27	-0.26
1985	2.28	-2.45
1990	1.51	-1.84
1995	2.19	-2.73
2000	3.30	-2.06
2003	0.87	-0.42
Average	1.183	-1.46

Nationalisation played no role before the 1970s. Country wealth shows a steady but increasing importance in FDI determination. The highest point of elasticity in relation to nationalisation was experienced in 1995, when FDI inflows dropped significantly. The highest point elasticity of 3.3% was recorded in 2000 for country wealth, when oil prices increased substantially.

## 7.5 Conclusion

This chapter has focused on the main determinants of FDI inflows to the Libyan oil and gas sector. The role of market size, government spending, crude oil extraction costs, oil reserves, world oil prices, and the nationalization have been investigated. The results of ADF tests indicated that all of the variables are first-order stationary at a 99% level of confidence. An empirical model was used to measure FDI inflows and other explanatory variables of the Libyan economy by using the Durbin models on the determinants of FDI inflows. As far as the regression determinants were concerned the results obtained showed that GDP level does not affect FDI either positively or significantly. FDI theory suggests that the size of the Libyan market is important for both the country and the foreign investors and so a positive change in GDP should lead to an increased inflow of FDI. However, in this study no statistically significant relationship was found between GDP and FDI inflows. RGDP exercised a negative and largely insignificant role on FDI. This was attributable to the fact the host country may be viewing the factor determinants of FDI inflows. Country wealth (CW) has a positive and significant effect on FDI. The study also discovered that FDI inflows in a current year are heavily reliant on the previous year's FDI inflows. Domestic investments (GS) showed a negative insignificant effect on FDI. This study also shows that UN sanctions (SAN) did not affect FDI inflows into the Libya oil sector during the study period. Overall, it could be argued that the economic factors determining FDI inflows into the Libyan oil sector were country wealth and previous FDI inflows. The evidence indicates that the nationalisation of foreign oil companies, implemented in 1972, is the most important internal barrier and the major dis-couraging factor for FDI inflows into the

Libyan oil sector. The study has also found no significant effect of oil prices, oil costs, oil reserves, exchange rates, interest rates, government spending on FDI inflows to the Libyan oil sector during the study period.

As a developing country, Libya should realise that FDI is ultimately beneficial to its economy. Therefore, the question still remains as to why Libya is not able to realise the full potential of FDI. The Government of Libya is aware of this fact and is watching the current situation and trends of FDI. The government is taking steps to liberalize in an attempt to cope with globalization, and has been deliberately slow in its efforts to open the economy completely.

## **CHAPTER EIGHT**

### **OTHER DETERMINANTS OF FDI INFLOWS.**

#### **8.1 Introduction**

Promotional efforts to attract foreign direct investment (FDI) have become a crucial aspect of competition amongst developed and developing countries. From the literature, FDI inflows to host countries are influenced by a wide range of economic, political, social and environmental factors. Therefore, the objective of this chapter is to underline some of these factors, which were not included in the previous chapter.

#### **8.2 Other Economic factors**

Does an environment of economic stability attract FDI? To analyze this question Hausmann and Fernández-Arias (2000) ran regressions on the size and composition of capital inflows and the instability of GDP growth and a measure of country risk. They found that the relationship was negative but that it was not significant when other controls were introduced. There was also a weak negative relationship between instability and the volume of capital flows

Dunning (1973) set the ball rolling on econometric studies with a statistical analysis of survey evidence on the determinants of FDI. His study identified three main determinants of FDI; market forces (including market size and growth, as determined by the national income of the recipient country), cost factors (such as labour cost and



availability and the domestic inflation situation) and the investment climate (as determined by such considerations as the extent of foreign indebtedness and the state of the balance of payments). Harris (1999) argues that the FDI inflows increase with export policy activism relative to non-intervention.

According to Davidson (1979) FDI location decisions are thought to be influenced by country specific variables such as economic situations.

### **8.2.1 Export and Import (Openness of Economy)**

Is capital attracted to more open economies? To answer this question, Hausmann and Fernández (2000) studied the relationship of the share of exports in GDP with the volume and composition of capital inflows. They found that the total volume of capital flows is positively and strongly related to openness. More open economies tend to attract proportionally more foreign capital.

Foreign firms place a premium on a distortion free economic and business environment. An allied proposition here is that a distortion free foreign trade regime, which is neutral in terms of the incentives it provides for import substituting (IS) and export industries (EP), attracts relatively large volumes of FDI (Dunning, 1973, 1981).

According to Fukao (2003) his findings reveal that FDI played a significant role in the rapid increase in trade in East Asia seen in recent years.

### **8.2.2 Exchange Rates**

According to Dunning (1973 and 1981) macro economic stability, signified by stable exchange rates and low rates of inflation is a significant factor in attracting foreign investors. Becker and Hall (2003) suggested that an increase in the volatility of the euro-dollar exchange rate tends to relocate R&D investment from the Euro Area into the UK.

According to Bénassy-Quéré (1999), foreign direct investors should worry about the exchange rate regime, because they cannot hedge at their horizon and are mainly interested in macroeconomic variables such as relative labour costs or purchasing power. The results of his research confirm the importance of the exchange-rate regime. Specifically, nominal exchange rate instability is detrimental to foreign direct investment, and its impact compares with that of misalignments. In addition, from the perspective of the host country, the correlation between the bilateral exchange rate viz-a-viz the country of origin and an alternative location has a sizable impact on inward FDI.

### **8.2.3 Interest Rates**

Interest rates play an important role in market economies. Interest rates change with the flow of general economic activity, and respond to the expectations of borrowers and lenders about future price levels.

According to Becker (2003) real long term interest rates have a significant effect on FDI. Makola (2003) argues the investors need reductions in inflation and positive real interest rates to restore confidence in investment. Roubini and Setser (2005) found that

in China any increase in interest rates would increase the incentive for hot money to flow into the country. Ngowi (2001) found that there is wide spectrum of FDI incentive; these include tax incentives, guarantees against arbitrary treatment in case of nationalisation, interest rates subsidies, and guarantees for loans and coverage for exchange rate risks.

The United Nations (2004) reported that the stage for the expected recovery in FDI is set by the acceleration of global GDP growth, relatively low levels of interest rates in major capital exporting economies, and the increase in domestic investment and industrial output. Furthermore, relatively low interest rate levels in major home countries reduce the cost of corporate financing for new investment projects.

#### **8.2.4 Tax Considerations**

One thing that may affect the choice of capital structure is the nature of the tax system. An obvious hypothesis is that higher taxes discourage FDI. Tax reduction or exemption on corporate tax, income tax, acquisition tax, registration tax, property tax and aggregate land tax may be granted to foreign direct investment

Government policies can also influence the attractiveness of the host country to foreign investors, through tax and regulatory initiatives. The a priori expectation is that, other things being equal, higher host government taxes will discourage inward FDI. Increased business regulations will have the same effect on FDI by increasing the costs of doing business in the host country. Indirect policies, such as the imposition of screening

agencies to review foreign direct investment proposals, can be seen as forms of business regulation directed specifically at foreigners, thereby, discouraging inward FDI.

Kaewsumrit (2004) exceptionally found that Japanese tax sparing stimulated FDI, while in the UK, Germany, and Italy it did not. The reasons for this difference are found in the treatment of foreign income in the European countries tax code.

According to Wells (2001), tax concessions were found to be insignificant as a determinant of FDI. He also found that the effect of tax policy on FDI is rather limited, at least compared with other factors, such as political stability, the costs and availability of labour, and basic infrastructure. The importance of these other factors suggests that tax policy is a poor instrument to compensate for various negative factors in the investment. Many countries, from South America to the Sub-Saharan Africa, have offered investment incentives for businesses to locate in underdeveloped, more costly, and otherwise unattractive regions with little success. These experiences strongly suggest that the fiscal investment incentives popular in developing countries have not been effective in making up for fundamental weaknesses in the investment climate.

However, according to Haufler and Wooton (2003) there is almost unanimous consent that the corporate tax rate of the host country has a significant, negative effect on inward FDI. Desai and Hines (2003) also claim that tax policies are capable of affecting the volume and location of FDI

An OECD Economic Survey of Turkey (2004) indicated that the privatisation of public banks and large industrial and network service firms should attract highly-performing international operators to Turkey. Besides generating FDI inflows, privatisation has the potential to significantly improve the efficiency of the economy.

### **8.3 Political Factors**

The change of government is different from the overall political instability. The former have been found to be insignificant in determinants flows of FDI to the country but political instability has an effect on international investors decisions (Singh, 1995).

Other studies have analysed the importance of political risk in different parts of the world. Mention may be made of the papers by Bennett and Green (1972), Green and Cunningham (1975), Kobrin (1976) and Thunel (1977), which all failed to establish a relationship between political risk and the flow of foreign direct investment; Nevertheless, Basi (1963) found that political stability in the host foreign country ranked either the first or the second most important factor influencing US overseas investors. El-Haddad (1986) also found this factor to have a similar importance. Schreiber's (1970) survey of US investors in Taiwan, found that political and economic stability to be of little significance to local-market oriented industries and export-oriented subsidiaries. Kolstad (2004) found that political freedom is a significant attractor of FDI flows.

According to Dunning (1973, 1981) political stability in the host countries is an important factor in the investment decision process of foreign firms. Also Davidson (1979) found FDI location decisions are thought to be influenced by country specific variables such as political stability

#### **8.4 Socio-economic Factors**

As pointed out by Hudanah (2004:6),

“Both national and foreign investors prefer to work in an environment that can be described as secured and transparent with an abundance and reliable source of information which help the planners to make the right decision. Moreover the existence of the right research and advice institutions; capable of providing assistance and sorting out problems, besides a flexible banking system, relatively stable policies and legislations and a system of economy based on the market mechanism are all essential elements. However, those voices, which are, rightfully, calling for the creation of the suitable environmental conditions, arise from the belief that neither private nor public organisations can achieve any economic success in the absence of these conditions. Therefore, since these conditions do not exist at the moment, then their availability becomes more important than privatisation per se, even though we concede that the efforts made to achieve that are undeniable”.

Kolstad and Tøndel (2002) tested the impact of a range of social development variables on FDI inflows per capita, for a sample of 61 developing countries, from 1989-2000. The results from this study indicate that religious tensions, ethnic tensions and internal conflict significantly reduce foreign investment. On the other hand, indices of external conflict, law and order, government stability, military involvement in politics, socio - economic conditions, corruption, and bureaucratic quality, all prove insignificant.

The body of econometric research on the determinants of FDI is large and diverse. Previous studies of FDI determinants indicate that there is a relationship between broad

indices of socio-political instability, institutional quality and FDI. Available evidence points in particular to corruption, and internal conflicts, as deterrents of FDI. Political freedom has a significant relation with FDI, depending on the dependent variable used. Some studies also indicate the positive effect of democratization on FDI inflows. The relationships detected in previous studies form the basis of our econometric analysis of FDI flows, the results of which are presented in the next section. In particular, we focus on the impact of corruption, political freedom and certain aspects of internal conflict. Though previous studies have shown an impact of labour standards on FDI, we do not pursue variables of this kind further, due to data availability (Kolstad, 2004).

According to Kolstad (2004), creating a favourable investment climate is crucial for economic development. He explore the impact of social development variables on FDI and private domestic investment, using panel data from 75 countries for the period 1989-2000. Our results show that reducing corruption leads to an increase in domestic investment. Though we did not find a significant impact of corruption on FDI, previous studies have established a similar relationship for FDI. Thus there is evidence to suggest that combating corruption can have a beneficial effect on both domestic and foreign investment. The improvements in political rights and civil liberties tend to increase FDI. In contrast, political freedom appears to have a negative effect on domestic investment. However, other studies suggest that democratization has a positive impact on corruption, which makes the total effect of political freedom on domestic investment ambiguous.

Kolstad (2002) tested the impact of a range of social development variables on FDI inflows per capita, for a sample of 61 developing countries, over the period 1989-2000. The results from this study indicate that religious tensions, ethnic tensions and internal conflict significantly reduce foreign investment. On the other hand, indices of external conflict, law and order, government stability, military involvement in politics, socio-economic conditions, corruption, and bureaucratic quality, were insignificant. He also found that the index of religious tensions is significant. Inquiring into possible causal relationships, we note that OLS estimation with lagged variables proves earlier values of religious tensions to be significant indicators of contemporary FDI flows. Though the evidence does not unequivocally establish a causal relationship where increased religious tensions within a country reduce inflows of FDI, we cannot rule out that such a relationship exists. Similarly, religious tensions appear to reduce foreign investment.

According to Kolstad (2004) the religious tensions appear to be a deterrent of FDI, but have no impact on domestic investment. In addition, socio-economic conditions could affect domestic investment through savings.

#### **8.4.1 Transparency and Accountability**

To achieve more goals through implemented economic plans, it is important to enhance and improve the level of transparency dealing between the government and foreign investors. Lack of transparency leads to a decrease in direct and indirect foreign investment. It is very important to issue new strong laws to promote the existing regulations. Hindrances to the free flow of information in the Arab region, whether in



public or private sectors, constitute greater barriers to development. (draft UN and UNDP, Transparency and Accountability in the Public Sector in the Arab Region, 2004)

Razin (2004) suggests that foreign direct investment depends on the accuracy of the productivity signals in the host country, relative to the source country. The more accurate are the signals, the less pronounced is the advantage of FDI investors, and the less abundant are FDI flows to the host country. These signals are proxied by the level of transparency in the corporate sector in each country. This is again consistent with our conclusion that a high level of transparency in the host relative to the source country promotes FDI flows.

Many empirical studies showed that the degree of non-transparency is an important factor in a country's attractiveness of foreign investors. High levels of non-transparency could greatly retard the amount of FDI inflows that a country might otherwise expect (Drabek & Payne, 1999). According to Dunning (1973, 1981) a stable and transparent policy framework towards FDI is attractive to potential investors.

However, Razin (2003) found that the degree of transparency in the host countries is negatively correlated with FDI flows. Countries with higher quality of corporate transparency associated with stronger credit-market institutions attract less FDI inflows.

#### **8.4.2 Administrative Structure**

After the 1969 revolution, the role of the government in the Libyan economy had gradually increased. Government expenditure as a share of GDP rose considerably. So did the number of jobs in the public sector. Ideologically, the state aimed to dismantle the state and attempted to create an image of a “stateless society” (Vandewalle, 1998).

First, Libya relied on FDI in its petroleum sector. Second, most of the oil projects were implemented by foreign oil companies. Third, in the agricultural sector small private farms were allowed to exist. Fourth, several small businesses continued to function especially by employing foreign labour. Finally, some Libyans “exited” from the state-controlled economy to the black market. Nevertheless, until the initiation of economic reform policies in the mid-1980’s, the state had a paramount role in the Libyan economy. The question then is how has this changed as a result of the new FDI policies?

It is noticeable that since the mid-1980’s drastic changes have taken place in terms of both policy and implementation. Retail and wholesale trade and services have been privatised and complete state monopoly on external trade ended. Through the tashrukiya system the controls of a number of small state enterprises were transferred to their employees. Most importantly in the long run, in the second and third stages have been attempts to create a legal institutional environment for the functioning of the new system.

However, it could be argued that in general terms the economic reform in Libya will lead to a “large liberalisation” in the near future. By that, the private sector would be expected to play a major role in the privatisation programme which may be extended to certain small and medium industries. There are two reasons for this. First, it is clear that as far as the state continues to rely upon oil revenues, which witness variations in the international oil market, its role in the economy would be affected accordingly. The Libyan government has faced many difficulties to accomplish its plans and projects, mainly due to sudden falls in the oil price in mid-1980s and the beginning of 1990s.

Second, politically, the attractiveness of FDI policies and the liberalisation of the Libyan economy became more favourable to the Libyan leadership, which allowed a new business class to run many economic activities. Meanwhile, as a result of the reforms the economic role of the state could be transforming. There will be less state participation in production and distribution compared to earlier periods, and less regulation. Obviously, regulation will still be necessary and to sustain the reforms the Libyan state will have to develop institutional capabilities.

The Libyan state has been facing important challenges in recent years. Creation of markets is a highly political process. It can be argued that markets dislocate groups in both the political and economic realm and this creates inequalities. Some of these issues have started to come to the forefront in recent years. Problems such as increasing cost of living and rising unemployment have been discussed in the current G.P.C. meetings: With an estimated population growth rate of 3.7 percent and decreasing revenues the

state has to help to create new opportunities for Libyans and foreigners through the privatization programmer.

The attempts to establish a new administrative structure built on EL-Shabiat “Municipalities” is an example of this. Recently the state also started to restructure the General People’s Committees. The results of these attempts remain to be seen. The secretariats that are directly associated with the economic sector have suffered from measures such as merger, cancellation and partition making it difficult, if not impossible, for the economic sector to adopt clear cut and stable policies.

Opposition has clearly been expressed by the Zahf Al-Akhdar news paper (several issues), publishing a number of articles in opposition to the restructuring of the economy, and describing the process “as a return to the old exploitative capitalism” demanding a return to the socialist system as prescribed by the Third Universal Theory. In addition, these reforms have been the issue of strong opposition by the directors and leadership of the public economic institutions who actually fear the loss of their privileged status following the implementation of the reforms.

Libya is set to establish a new free zone in the eastern part of the country. The General People’s Committee has passed a resolution to establish a free zone to be used for commercial and foreign investment activities.

### **8.4.3 Corruption level**

Corruption is defined as the misuse of entrusted power for private gain. There is now a sizeable body of literature on the causes and consequences of corruption in developing countries. One message here again is that increased government interference in the market place is one of the key reasons for the widespread corruption in countries such as India and China (Balasubramanyam, 2003).

Recent research has suggested that conflict and corruption deter foreign investment (Wei, 2000). In general, African countries score low. While it is more difficult to do business in a country with more corruption and conflict, some investment is likely to take place regardless. In particular, FDI in the extractive industries does not have a choice but to locate near the available natural resources (e.g. Nigeria, Angola etc.).

Asiedu (2003) argues that the natural resource endowment, large markets, good infrastructure and an efficient legal framework promotes FDI, while macroeconomic instability, corruption, political instability, and investment restrictions have the opposite effect, suggesting that governments can play an important role in promoting FDI to the region.

Kandiero (2003) has indicated that Africa's global share of foreign direct investment (FDI) has lagged behind other regions in the world, despite the sharp increase in FDI inflows to the region in 2001. Factors contributing to this circumstance include high corruption, weak governance, poor infrastructure, etc.

Corruption has a negative effect on the probability that a foreign firm will invest in a country. These results are consistent with theory when bribing reduces production costs and local firms have an advantage in bribing vis à vis foreign firms (Hakkala, 2005).

According to Kolstad (2004) reducing corruption leads to an increase in domestic investment. There is thus evidence to suggest that fighting corruption can have a beneficial effect on both domestic and foreign investment.

According to Asiedu (2005) he found natural resources and large markets promote FDI. However, lower inflation, good infrastructure, an educated population, openness to FDI, less corruption, political stability and a reliable legal system have a similar effect. He suggested countries that are small or lack natural resources can attract FDI by improving their institutions and policy environment.

### **8.5 Legislation System**

Robson and Radulescu (2003) supported the view that increases in the strictness of regulations governing employment contracts may have a deterrent effect on FDI. However, we find evidence for a nonlinear effect, such that very high levels of employment protection may actually help to make an economy a more attractive location for FDI.

The regulations in general can be characterized as transparent and streamlined. The recent reforms in the economic and social structure was the adoption of liberal and

flexible foreign investment policies such as Law No.5. In reflecting these changes and modern needs, the foreign investment law was substantially modified and liberalized

According to Mudd (2003) the complexity and uncertainty of regulations, such as of multiple tax rates, indeterminate language in the tax law, and inconsistent changes in the tax laws have a significant negative effect on inward foreign direct investment. Mehmet (2002) points out that frequent changes in rules and regulations have created a degree of uncertainty that impacts negatively on business development in general).

Creating a sound investment climate is vital for improving the economic performance of developing countries. It is a well established empirical fact that economic growth is higher in countries that have higher investment rates (Levine and Renelt, 1992).

Environmental legislation brings together the issues of environmental policy and technology diffusion in order to understand better how foreign investment might react to policy. Environmental legislations should include: wildlife protection, forest conservation, water (prevention and control of pollution), water (prevention and control of pollution), air (prevention and control of pollution), the environment (protection), the public liability Insurance (Bhattacharya, 2002).

According to Davidson (1979), FDI location decisions are thought to be influenced by country specific variables. A favourable overall investment climate including adequate infrastructure, legal system, etc, will support domestic capital accumulation and be

attractive for FDI. FDI is generally a powerful means of enhancing competition and the growth potential.

## **8.6 Privatisation**

Privatization is clearly a critical step on the path to liberalisation and the leading reform is government bodies that are known to be considering the sale of public enterprises. The government is keen to lay the groundwork for libya's application to the World Trade Organization. However, no clear decision about a privatization road map has yet been made. Given the government's tendency to implement new policies abruptly and without half-measures, it is possible that it may adopt an all or nothing approach, opting for a rapid and sweeping overhaul of the public sector.

Privatization faces considerable obstacles. Many public enterprises are inefficient and unproductive and therefore unattractive propositions for private investors. The new policy of economic openness is mainly based on the launch of a huge programme involving the privatisation of up to 360 public sector utilities, involving activities such as the iron and steel industry, petrochemicals, cement, trucks and vans assemblage, textile and shoe industry and agriculture. The privatisation programme will involve three stages spanning the period 2004-2008 with potential returns estimated at \$8 billion. To reach that end, the General Corporation for the Transfer of the ownership of companies and economic units has been established (2004) to set up the stage by introducing the necessary provisions and mechanisms that will assist in the smooth transfer of the public utilities to the private sector. The main purpose, however, is to



extend the base for ownership paving the way for individual ownership in the hope that this will enhance individual contribution to production and public wealth. In this context the chance for ownership will be open for both national and foreign investors as well as for the workforce of public and small companies. At the same time; necessary measures will be considered to alleviate any potential adverse effects of privatisation on the workforce. The state is also considering the privatisation of other sectors including, banks, roads, airports, telecommunications, electricity and the water and oil sectors. Moreover Libya will consider implementing the “offset system” on its international suppliers of military equipments. This system implies that 30% of every deal will be allocated for investment in local projects in the country.

According to Velde (2001a) FDI attracted by privatisation of state utilities may enhance efficiency, but does not guarantee affordability of services for all without proper regulation or competition policy. In addition to a consistent implementation of FDI promotion efforts, it is also important that government policy in other fields (e.g. policy related to education, technology, competition or privatisation) is implemented consistently without engaging in policy reversals.

Privatisation programmes have become a source for attracting FDI. Most African countries had double-digit inflation rate in the 1990s, which is not favourable to investors. Privatisation programmes do usually attract FDI investments. Ghana and Uganda have been successful examples of privatisation with strong participation of foreign investors. To achieve this, the host countries should set clear rules regarding the privatisation procedures. They should also set transparent and solid regulatory

framework for the sectors that are being privatised. Privatisation of the state owned enterprises should be pursued to allow the enterprise to operate in an efficiency-oriented environment to achieve profitability. Clear rules regarding the privatisation procedures should be set. Export processing zones should also be established (Makola, 2003).

Possibly the most important institutional change in transition is the change of ownership (Estrin, 1994; World Bank, 1996). State-owned firms are privatised on a large scale, while a small incipient entrepreneurial sector gradually gains market shares. Both forms of privatisation create opportunities for foreign investors in multiple ways:

- 1- Private firms are more adept partners for Western businesses, lowering transaction costs;
- 2- Private ownership encourages entrepreneurship and thus reinforces the competitive character of local markets, and
- 3- Privatisation itself creates opportunities for acquisitions and joint ventures.

Therefore, we expect that all forms of privatisation and private sector development have a positive impact on inward investment: Progress in privatisation increases FDI inflows, and also Indexes the extent to which privatisation is geared towards FDI (Bevan, 2000).

Kai (2003) used empirical model to show that the traditional determinants, such as market potential, low relative unit labour costs, a skilled workforce and relative endowments have significant and plausible effects. In addition, transition-specific factors such as the level and method of privatisation, and country risk, play an important role in determining the flows of FDI into the Central and Eastern European Countries

(CEECs) and help explain the different attractiveness of FDI for individual countries. The relevance of other determinants notwithstanding, the decision to invest in CEECs relies heavily on the level and method of privatisation. Privatisation should be advanced in order to increase economic efficiency. It would also help to attract FDI inflows (OECD, Policy Brief 2004).

### **8.7 Liberalization**

There are two alternative explanations for the liberalization of FDI policy. The first argues that liberalization reflects a “rational” decision on the part of host country policymakers, a response to changed technological and economic conditions or the increasing “costs of closure” for FDI. In this view, liberalization reflects a belief that lower barriers and increased flows of FDI are in the national interest. The second argues that liberalization is a response to external factors, specifically, the spread of neoliberal ideology possibly through pressure from either the United States or international financial institutions (Kobrin, 2005).

The decade of the 1990s was characterized by widespread liberalization of laws and regulations affecting inflows of foreign direct investment in developing countries. Country size, level of human resource capabilities and trade openness are found to be the primary determinants of the propensity to liberalize (Kobrin, 2005). Increasing economic integration, which includes policy liberalization, is reflected in dramatic increases in flows of FDI into developing countries during the late 1980s and the 1990s (UNCTAD, 2004).

United Nations Centre on Transnational Corporations (1991) looked at changes in FDI policies in 46 developed and developing countries over the years 1977-1987, including both restrictions and incentives. The study concluded that there was an unmistakable liberalization of foreign direct investment policies in all categories of nations over the 1980s, with the largest number of policy changes per country occurring in the newly industrializing countries (UNCTC, 1991, p. 59). Williamson (2000) believed that the process of intellectual convergence after the collapse of communism was reflected in ten economic reforms: the seventh was liberalization of flows of foreign direct investment (FDI).

Recently, the Libyan authorities have shown commitments towards reforms aimed at the monetary and banking sector. Key priorities will be given to the Central Bank of Libya (CBL). The CBL will get greater operational independence in the conduct of monetary policy. In general this will be greater reliance on market-based monetary instruments, liberalized interest rates, and the elimination of direct credits. Also the authorities' stressed the importance of strengthening bank supervision and ensuring adequate asset classification and provisioning, in line with international best practices. They commended the authorities' intention to privatize public banks and allow foreign banks to operate in Libya. Directors noted that there appeared to be no indication of pressure on the exchange rate. Going forward, the authorities should be prepared to adjust the exchange rate peg as necessary in response to market developments and keep exchange rate policy under review as reforms progress, to help ensure the competitiveness of the non-oil sector (IMF, 2005).

Since the conclusion of the Lockerbie case, US and UN sanctions against Libya have been lifted and Libya's relations with the West have improved substantially. In parallel, Libya has begun a series of economic reforms with a view to further integration with the world economy. Another step in this direction is the recently announced intention to apply for membership of the World Trade Organisation (Enterprise Ireland, 2004).

## **8.8 Globalization**

Globalization has sparked one of the most highly-charged debates of the past decade. It has been the subject of countless books and the cause of major demonstrations in Europe and North America. Critics of globalization have argued that the process has exploited people in developing countries, caused massive disruptions to their lives and produced few benefits in return. Supporters point to the significant reductions in poverty achieved by countries which have embraced integration with the world economy such as China, Vietnam, India and Uganda.

Global flows of foreign direct investment have more than doubled relative to gross domestic product. The flows increased in the 1990s, rising from US\$324 billion in 1995 to \$US1.5 trillion in 2000. However investment levels recently fluctuated considerably depending on the prevailing economic and political climate. The global economic slowdown has reduced financial flows in the past couple of years, against the long-term trend of increases, and political and economic instability have exacerbated problems in

some regions. But FDI has remained strong in East Asia and the Pacific and in Europe and Central Asia. Developing countries received around a quarter of world FDI inflows in 2001, though the share fluctuated quite a bit from year to year. This is now the largest form of private capital inflow to developing countries.

The remaining mechanism is FDI, in which global corporations take controlling ownership positions in foreign business units, either through acquisition or by building completely new operations. The lesson of the 1990s is that FDI is by far the most productive channel for directing capital to the developing world. FDI increased substantially in the last decade and now swamps all other forms of developing-world investment, exceeding official aid by a ratio of four to one (Achtmeier, 2002). Addison and Heshmati (2003) showed that the spread of information and communication technology (ICT) throughout the world increases FDI inflows to developing countries.

Developing countries which are not participating in the process of globalization, or those having poorer policies compared to other countries, run the risk of becoming comparatively less competitive in the global economy. The World Bank amongst others, argues that those countries that integrate faster in the global economy produce faster growth (Abugre, 1997).

## **8.9 Conclusions**

Attractiveness of foreign direct investment (FDI) has become the crucial point of competition among developed and developing countries. From the literature, it is clear that FDI inflows to host countries are influenced by economic, political, social and environmental factors.

Capital flows tend to go to countries that are more developed, more open, more stable, financially more advanced, with higher transparency levels, lower corruption levels, and better institutions.

Libya needs reforms in order to improve its institutional framework that supports investment, finance and risk-taking. It needs to generate a reduction in overall risk by making markets more efficient, competitive and complete. It also needs to participate participating in the process of globalization.

## **CHAPTER NINE**

### **SUMMARY AND CONCLUSIONS.**

#### **9.1 Summary and Conclusions**

The purpose of this thesis has been to identify and analyse the factors influencing FDI inflows to the Libyan oil sector during the period 1962-2003. Libya has comparative, location specific advantages for attracting FDI. These advantages are highlighted in Dunning's Eclectic Model of FDI as a motive for establishing production in a particular foreign country. Libya has many comparative locational advantages such as a huge area of 1.75 million km<sup>2</sup>, a long coast line of 2000 km, vast proven crude oil and natural gas reserves, a very high quality of sweet crude oil and gas, close proximity to Europe, and favourable extraction costs.

The Libyan economy is completely dependent on revenues from the exports of crude oil and natural gas. Oil and gas revenues, on the other hand, depend heavily on the scale of activities of FOCs. The Libyan oil industry is run by the state-owned National Oil Corporation (NOC) along with several FOCs. FOCs are engaged in exploration, drilling, production, development, consulting and service agreements with the NOC. Despite almost half a century of exploration activities, Libya remains largely unexplored with huge reserves of oil and gas. The intention of the Libyan government is that FOCs should help increase the country's oil production capacity from 1.4 million



barrels per day at present to 2 million barrels per days over the next five years. Libya is actively courting FOCs, and is considered a highly attractive oil and gas province.

The search for oil in Libya began in the 1950s. Oil was found in 1959 by the US oil companies in huge quantities, which was high in quality with lower extraction costs, followed by the first oil production in late 1961. This encouraged other companies to come and invest in Libya during the 1960s, 1970s, and 1980s. In 1992 the US and UN imposed sanctions on Libya. The US withdrew all of their companies from Libya and imposed sanctions on any FOCs already investing or going to invest in Libya. This affected badly the Libyan oil sector and prevented FOCs from entering the Libyan market. In 1999 the sanctions were lifted and there were no barriers to FOCs investing in Libya. Together with the adoption of FDI policy by the new Libyan government, these factors attracted more FOCs to Libya.

In the case of Libya, however, the inflow of FDI into the oil sector has been insignificant over the study period. Also the experience of the developing world in general suggests that it is far from certain whether or not FDI will indeed act as an engine of transition in Libya. Libya stresses the great importance of foreign capital in the oil sector as a critical element of economic growth. But in spite of efforts to attract foreign oil investors, the Libyan share of world investment inflow is still very low. However, during the 1990s, the levels of FDI inflows to the Libyan oil sector have been gradually increasing, although still lower than comparable levels in the 1980s.

A time series data analysis which covered the study period (1962-2003) has been used to identify and analyse the most important economic factors affecting FDI inflows to the

Libyan oil sector. The study has identified factors behind FDI inflows to the Libyan oil sector. The previous year value of FDI inflows (FDI-1) to the Libyan oil sector had the strongest positive impact on the current year's inflows. This means that the current FDI inflow value is dependent on last year's value of FDI inflows. The results indicated that on increase in the previous year's value of FDI inflows of 1% leads to an increase in the value of FDI inflows in the current year of \$0.820 million. The second positive economic force driving the FDI inflows across the Libyan oil sector was the country wealth, which was calculated by multiplying oil prices and proven crude oil reserves. Moreover, increasing country wealth by 1% led to an increase in FDI inflows in the same year of \$ 0.472 million.

The nationalization of FOCs, implemented since 1972, was the third economic force driving the FDI inflows across the Libyan oil sector. The nationalization of FOCs should have a negative effect and discourage FDI inflows. The results indicated that increasing nationalization by 1% would lead to a decrease in FDI inflows in the same year by nearly \$300 million.

The study found no significant relationships between FDI inflows and oil cost per barrel, real GDP, government spending and world oil demand. The study found no evidence that government spending on the infrastructure affected capital inflows. It was expected that investment decision by FOCs would be influenced by Libyan economic indicators, but only limited evidence could be found.

The study also examined empirically the effects of both US and UN sanctions on FDI inflows to the Libyan oil sector. Surprisingly, no significant relationship was found. However, practical evidence provided by Libyan official documents showed the net effects of the sanctions on every sector in the Libyan economy. This official document produced by the Libyan government addressed to the UN Security Council explained and identified the real Libyan losses during the period of sanctions imposed from 1992 until 1999.

In real terms, Libyan crude oil prices were always among the highest in the international oil market. Higher prices in the international market reflect higher crude quality compared to oil from other producers. As a consequence, it was expected that Libyan crude oil quality would be one of the most important factors attracting foreign investors. Empirically though, the study shows no significant relationship between these variables.

The extraction costs of Libyan oil have always been among the lowest in the world. However, the study found no significant relationship between FDI inflows to the Libyan oil sector and Libyan oil extraction costs.

Improved transparency and accountability levels would achieve more goals and save time and energy through implemented economic plans. This step was more important for economic development in general and for attracting domestic and foreign investors.

One of Libya's strategic goals is to diversify the national income and to minimise the role of the oil sector in the economy through finding new sources of income. Therefore,

at the moment Libya is seeking FDI activities in energy, tourism, services and other sectors in order to bring in foreign capital and save domestic savings. Indeed, the success of such investments would become easier, even if local finance was not available, once other factors of production became available.

The same of FDI inflows would not be a matter of concern for Libya. However, companies coming from the US and the EU might have comparative advantages in operating in Libya. Factors of proximity and history might have a positive affect. From the history of business activity between the US, EU and Libya this study has shown that FDI inflows have been attracted to Libya at certain times are the past fifty old years.

Libya's pledge to dismantle its programme to develop weapons of mass destruction (WMD) could pave the way for the return of the US oil companies which left the North African country in 1986 when the then President, Ronald Reagan, imposed sanctions on the country. The US has lifted the Libyan portion of the Iran-Libya Sanctions Act. The United Nations lifted its sanctions against Libya in September 1999.

Libya is trying to convince FOCs to return as it seeks \$30 billion of investment in its energy sector. It hopes to increase oil production from 1.3 million barrels a day to 3 million by 2010. However, its oil target is still short of the 3.5 million barrels a day it produced in 1970. Oil export revenues account for about 95% of Libya's hard currency earnings. Libya's oil refinery capacity, its gas reserves, and liquefied natural gas (LNG)

industries have all suffered from underinvestment due to the economic sanctions, which included a ban on importing refining equipment.

As Libya's re-acceptance into the international community has generated significant opportunities for foreign businesses, and the Libyan authorities are inaugurating a new era of openness. The new relationship with the world community gives rise to the chance to open the door for new FOCs to invest in Libya. The new political environment should lead to a new economic environment, which is what has been happening since the sanctions were lifted in 1999.

Currently, FDI inflows to Libya have improved significantly to US\$700 as recorded in 2003. This is the highest in Libyan FDI history. However, there have been two main complicating factors. The first, external factor was the aftermath of the Lockerbie crisis, and the US and UN sanctions. An opportunity then arose for Libya to build new relationships with the US and the western world. Libya also began negotiations with the WTO, a member of the African Union, the Arab Maghrib Union, a member of the Euro-Mediterranean partnership agreement process (5+5 Dialogue) and Chairman of the Community of Sahel-Saharan States (CEN-SAD). Therefore, reaching partnership agreements with the international communities would encourage FDI activities from these countries interested in free access for its exports to international markets. Secondly, the internal factor of healthy economic growth has developed as a result of the improved investment climate after the passing of new investment laws (Laws number 5 & 7), the accelerated privatization effort, the adoption of new government policies for attracting FDI inflows, newly discovered oil and gas reserves, and the

completion of the new Libyan-Italian project for the transportation of oil through pipelines under the Mediterranean Sea to Italy and other European countries.

Finally, from the above discussion, FDI inflows to the Libyan oil sector are currently visibly growing, and the foreign investment environment in Libya is promising for the foreseeable future.

## **9.2 Policy implications**

In spite of the locational advantages of Libya and the establishment of foreign investment laws to encourage FDI inflows, foreign investment inflows also need trust, safeguards, protection and economic stability.

The results concerning the determinants of FDI inflows to the Libyan oil sector provide the basis for policy construction and implementation. Considering the Libyan economic conditions, and taking in account the volume of FDI inflows to the Libyan oil sector, it is recommended that the flow of FDI to Libya should be increased. To achieve this objective, several policy steps have to be taken.

The following policy implications will hopefully provide a framework that with enables the Libyan government to provide a healthier business environment and create a better atmosphere that enhances the attractiveness of the country as a location for foreign investment operations. This will also help to improve technology absorption and accomplish the country's plans of development and growth.

- 1- A detailed feasibility study including the technical and economic aspects of the proposed projects should be conducted. Conferences and symposia which promote investment in Libya should be encouraged. In this respect the role of both the local and foreign media should be pivotal.
- 2- The stage should be set by removing all the potential obstacles that might hamper the enforcement of Law No. 21 concerning the engagement in economic activities, and other related laws and regulations. This will be achieved by reviewing, amending and simplifying the rules and directives associated with economic activities in general and the private sector activities in particular, in such a way that these laws become clear and simple and do not hamper the production processes.
- 3- Continuing the exemption policies by exempting new projects from taxes on profits, making land available for national and foreign investors, and providing other services so that they can be persuaded to invest in the regions allocated for investment.
- 4- Activating the role of the media in educating the general public, making them aware of the new role of the private sector in the development process and promoting joint ventures involving private and foreign investment.
- 5- The results of this empirical study indicate that the nationalisation of FOCs lost Libya almost \$300 million worth of FDI per year. Therefore, it is very important to implement a new policy in order to open the door for foreign oil companies to invest in the Libyan oil sector.
- 6- Financial and currency policies should be promoted by removing restrictions on foreign exchange and by activating the role of banks and other financial institutions in providing long-term and short-term loans and credit facilities. However, the

implementation of clear policies that will provide investors with easy sources for funding their projects is a prerequisite for boosting investment.

7- More attention and effort needs to be paid to enhancing social stability, which can be achieved, for instance, by enhancing real democracy in the country, ensuring fair distribution of income, as well as assuring social security and human rights.

8- The availability of development plans at both the central government and regional levels is another essential element. These plans will tend to outline the different requirements, and therefore the different projects needed to satisfy these requirements, for each region. Moreover, these plans will make it possible for policy makers to spot the right investors, whether local or foreign, for the execution of the different projects, especially with regard to the production of consumer goods and providing services.

9- The proper organisation and location of investment projects through establishing industrial areas and free zones would make it easy for investors to obtain the right locations for their projects. This arrangement will also tend to protect the environment by limiting industrial utilities to certain areas in towns and cities, besides making it easier for the authorities to provide these areas with the necessary services.

10- It is important to establish centres to assist in promoting the tourism sector by providing the necessary services in this field. These centres should be established in provinces with considerable potential for tourism, such as old cities with abundant archaeological sites, and other tourist attractions such as beaches and deserts. The government should place an emphasis on the tourism sector. The world attract FDI inflows and to be another source of national income.

11- Further exploration of natural resources such as minerals, resources, and the semi-manufactured products and raw materials should be encouraged.



12- It should be ensured that infrastructure and other basic facilities meet international standards. These include drinking water and sewage networks, electricity, roads, transport and telecommunications, and especially stationary and mobile telephone services. All of these services are important for sustaining investment projects. In this regard, however, investors can be persuaded to invest in development projects, particularly projects involving the generation of electric power and telephone services.

13- Modern technology should be introduced in the field of information. This will services at cheap and competitive prices as is the case with most other countries in the world.

14- Priority should be given to the development of human resources through intensive training. This training should be undertaken by specialised institutions that match international standards. This will provide the skilled labour needed to execute investment projects. In this regard training per se is a potential area for investment provided that projects in this area are well managed and controlled to provide the required quality training programmes.

15- It is necessary to work towards establishing modern information systems in all economic sectors. These systems will provide the necessary statistical information with regard to socio-economic and demographic activities on a regular basis. This will enable investors to conduct the necessary socio-economic studies to investigate issues such as the nature of markets, consumption trends, the availability of resources and the nature, size and composition of the workforce.

16- One of the most important aspects for encouraging investment is the implementation of consistent policies with respect to the standards and specifications in

relation to both local and foreign products, whereby any products that fail to meet the required specifications should be removed from the market for the sake of fair competition.

17- The Libya Foreign Investment Board (LFIB) should be strengthened to enable it to provide facilities to foreign investors by ensuring simplicity, complaisance and transparency in the legal framework for FDI. The LFIB could also ease administrative controls and implement such measures as it believed necessary to create a more attractive investment environment in Libya. Factors like good governance and corruption-free administration are also crucial in developing a positive image of the country throughout the world. The activation of the provisions of Law No. 5 will encourage foreign investment by stipulating the establishment of a special government body for this purpose (the Authority for Investment). Therefore, enforcing this law will make life easy for investors ensuring that all services will be provided by a single government body.

18- Banking services should be improved by introducing credit cards to insure smooth transactions for visitors to Libya in general and foreign investors in particular.

19- Establishing a stock exchange will provide investors with the necessary means to promote their projects and companies. For example, it will provide them with the necessary funding through selling shares or awarding public loans in form of bonds.

20- The entire Libyan administrative system needs to be reformed by introducing a new policy of reducing the bureaucracy and encouraging transparency. Levels of transparency and accountability between the government and foreign companies should also be increased.

- 21- The government should create financial incentives for potential investors to get involved in the training of labour. The government, for example, could give tax concessions in return for training provided by investing firms.
- 22- Libya should get involved in existing plans for a regional railways network. Libyan's transit trade would be at risk if its government lagged behind and did not take the lead in building the railway network connecting the ports of Tripoli and Benghazi to the industrial zones and to the boundaries with Egypt and Tunisia.
- 23- A coherent legal framework for FDI should accompany measures to expand markets and provide competitive factors of production. A set of measures could establish a legal framework for FDI and administrative reform. All legislative decrees related to FDI should be combined together in one law after amending the rules that hold back FDI activities.
- 24- The process of privatisation should start as soon as possible, accompanied by all the requisite administrative reform, to attract foreign capital and to relieve the government of some public sector utilities that are draining the government's resources. Therefore, when privatisation expands the market, the provision of cheaper production factors and administrative reform should be the basis for Libyan government policy to attract FDI inflows. The government should encourage the private sector to become more involved in operating utilities, and should focus more on establishing a helpful environment for FDI activities in which free competition is guaranteed.
- 25- Libya, like many neighbouring countries, needs to compensate for its disadvantages in having a limited market size. Thus, to derive the advantages of dismantling trade barriers between Arab countries and establishing customs unions,

economic integration would serve as an incentive for foreign investment, and would create bigger markets and achieve greater mobility of labour and capital.

26- With the possibility of a pollution effect caused by FDI, environmental legislations should include: wildlife protection, forest conservation, water, and air (prevention and control of pollution), and the environment (protection). However, as foreign investors may be sensitive to this issue, the government may be cautious in implementing such mandates.

The main purpose of this study has been to discover and highlight the factors determining FDI inflows to the Libyan oil sector, as well as the factors which increase the attractiveness of Libya for FOCs investment. This analysis can be made available to decision makers to help them to make appropriate decisions in this area.

### **9.3 Justification of the Study**

1. To date, no previous study has specifically investigated and analysed the factors determining FDI in the Libyan oil sector.
2. The research is new for Libya based on conducting a questionnaire and interview survey of FOCs in the Libyan oil sector and time series analysis technique.
3. The research is new in terms of analysing new factors related to FDI inflows to the Libyan oil sector, such as nationalisation of FOCs, the sanctions, and the country wealth.

4. The research is new in terms of developed econometrics model for determinants of FDI inflows to the Libyan oil sector.

## **9.4 Scope and Limitations of the Study**

The study is designed to identify and analyze the variables which influence FDI inflows to the Libyan oil sector. It explores the perspectives of two types of participants (government officials and foreign investors). Like any other empirical study, the study has its limitations. Getting information and perspectives from government officials is not usually easy, as issue could be regarded as sensitive, especially when the opinion of the respondents is not in the line with the official government policy. The data and information on capital investment needed from foreign investors also prove to be sensitive question. This was because foreign companies might well be reluctant to voice criticism of the government policies and attitudes.

Primary data: (questionnaires and face-to-face interviews) proved to be time consuming, but rewarding as such surveys have not been conducted previously. The format of the questionnaire and detailed analysis of the data (from both questionnaire and interview) have been presented in chapter 6.

Secondary data have been rather difficult to compile as they are scattered and collected by different agencies who have different method of data collection. In most cases, discrepancies in data definition and values were marked.

### **9.5 Suggestions for Future Researches**

This study has identified and analysed the factors determining FDI inflows to the Libyan oil sector from the perspectives of historical data, foreign investors and government officials. Information was collected from officials representing Libyan government agencies relating to foreign investment and oil company executives representing foreign companies located in Libya. However, the study has raised a number of questions and has many limitations, which provide opportunities for future research. An attempt has been made to begin to fill the existing gap in the literature on FDI in Libya in terms of the scope of the study and the extent of the analysis. However, both resource constraints and lack of existing research in the subject have restricted the discussion of some issues. These can be put on the agenda for future research.

1. A similar study should be conducted on the effects of FDI inflows to the Libyan oil sector in such areas as employment generation, technology and skill transfer, flows of foreign exchange, new training programmes, new management techniques, the creation of domestic competition and new product varieties, the exploitation of natural resources, enhancing national output and accelerating economic development. Cost/benefit analysis and other techniques could be used to measure the direct and indirect effects of all the positive and negative consequences of FDI.
2. A more wide-ranging study of foreign companies operating in Libya should be conducted covering other economic sectors, such as tourism, finance, agriculture and manufacturing.
3. In order to study the overall impact or determinants of FDI inflows to developing countries, a cross country study should be conducted. It would be interesting

here to measure the effect of FDI inflows on employment creation, trade balances or GDP.

4. Similar studies across different countries may be able to further exploit the effects of FDI on host economies, comparing the effectiveness of promotional and favourable government attitudes in attracting FDI, and examining how regulatory policies restrict FDI.

5. This study may be extended and incorporate a forecasting / simulation test to assess the impact of changes in policies, laws and regulations towards FDI in the future.

6. The effects of recent policy stances in the context of FDI inflows to Libya are another promising area for further research. This would help appraise the effectiveness of such policies and determine the need for further measures.

At the start of the new century, there is a need to carefully evaluate the rapidly growing competitive environment for FDI both at regional and global levels. The government needs to develop strategies, based on good governance, to achieve macroeconomic stability, to ensure policy transparency and credibility, to strengthen infrastructural and institutional frameworks, enforce the rule of law in the country and to develop competition through deregulation and privatisation. Such factors are expected to help to support a more positive environment for FDI and to cope with the dynamics of world demand for FDI. Socio-economic policies need to be adjusted in such a way that Libya becomes competitive in the changing global economic environment, as viewed from a regional perspective.

## BIBLIOGRAPHY

- Abbas, H. W. (1987) Industrial Development and Migrant Labour in Libya. Manchester: the University of Manchester, PhD Thesis.
- Abdel-fadil, M. (1987) The Macro-behaviour of Oil rentier States in the Arab Region, in H. Beblawi and G. Luciani (eds.) *The Rentier State*, 83-107.
- Abdel-Rahman, A-M. M. (2002) The Determinants of Foreign Direct Investment in the Kingdom of Saudi Arabia. Department of Economics, King Saud University, Riyadh.
- Abdullatif, A. A. (1994) *The Making of the Modern Libya: State Formation, Colonisation, and Resistance. 1830- 1932*, NY: State University of New York Press.
- Abou-kahf, M. A. (1985) *Foreign Direct Investment in Developing Countries: An Analysis of the Determinants, Impact, Policies and Organisation with specific reference to the case of Egypt*. University of Strathclyde. PhD thesis.
- Abozrida, A. B. (1981) *An Investigation of the Emerging System of Host Government Participation in the International Oil Industry with Particular reference to Libyan Participation Agreements*. PhD dissertation, Management Centre, The University of Aston, Birmingham.
- Abugre, C. (1997) *The Proposed Multilateral Investment Agreement (MIA) And Africa's Desire For Foreign Direct Investment (FDI)*. Third World Network. Accra.
- Achtmeyer, W. F. (2002) *Global Connection. Views on Globalization, The Digital Revolution, And Leadership* Center For Global Leadership.
- Addison, T. and Heshmati, A. (2003) *The New Global Determinants of FDI Flows to Developing Countries: The Importance of ICT and Democratization*. Discussion Paper No. 45.
- Afshin, J. & Khashayar, B. (2000) *The Libyan Oil & Gas Report: a strategic guide to operating and investing in the Libyan oil & gas market*. Global Energy Reports. SMi.
- Agarwal, J. (1980) Determinants of Foreign Direct Investment: A Survey, *Weltwirtschaftliches Archiv* 116, 739-773.
- Agarwal, J. P. and Ramaswami, S. (1992a) Choice of foreign market entry mode form: The impact of ownership, location and internalization", *Journal of International Business Studies*, 1st. Quarter, 1-27.



- Agarwal, S. (1994) Social-cultural distance and the choice of joint ventures: a contingency perspective. *Journal of International Marketing*, 2 (2): 63-80.
- Agmon, T. and Lessard, D. R. (1977) Investor Recognition of Corporate International Diversification, *The Journal of Finance*, 32, 1049-1055.
- Aharoni, Y. (1966) *The Foreign Investment Decision Process*, Boston: Division of Research, Harvard University.
- Ahiakpor, James C. W. (1990) On Keynes's Misinterpretation of "Capital" in the Classical Theory of Interest. *History of Political Economy* 22 (Fall): 507-28.
- Alan, J and Day (1992) *Libya: Economy, The Middle East and North Africa*, 38th Ed., Europe Publications Limited, 690-708.
- Al-Gdamsi, M. A. (1998) *Libyan oil*. Dar Algil.
- Ali, A. J. (1999). Middle East Competitiveness in the 21st Century's Global Market. *The Academy of Management Executive*, 13(1), 102-108.
- Aliber, R. Z. (1970) A theory of direct foreign investment. In *The International Corporation* (ed) Kindleberger C P, The Yale University Press: New Haven.
- Allan, J.A. (1983) Libya Accommodates to Lower Oil Revenues: Economic and Political Adjustments, *Journal of Middle East Studies*, 15, (3), 377-85.
- Al-Qadhafi M. (1977) The green book. (Part One, The Solution of the Problem of Democracy "The Authority of the People". Part Two, The Solution of the Economic Problem "Socialism". Part Three, The Social Basis of the Third Universal Theory).
- Al-Qadhafi, Saif-Aleslam (2002) *Libya and the XXI Century*. Hayward: Faculty of California State University. Italy: One 9 Media.
- Al-shahomi, S. S. (2003) *The Foreign Investment motivates and obstacles in Libyan*, Paper presented in Conference on The Investment in the Libyan Economy. Benghazi: University of Garyounis, 8<sup>th</sup> –10<sup>th</sup>, July.
- Al-tsean, (2003) *Special Report: Ready, Aim, Sanction*. Alternative Asean Network on Burma.
- Al-yagout, M. A. (1997) *The regulation of foreign investment in Kuwait: the role of law, politics and economic policy in the development process*. University of Warwick, England. PhD thesis.
- Amin, S. (2004) *Recent Developments in Libya*. Carnegie Endowment for International Peace, February 10, 1.
- Anderson, E. and Gatignon, H. (1986) *Modes of Foreign Market Entry: A Transaction*

- Cost Analysis and Propositions. *Journal of International Business Studies* 17(3) 1-26.
- Anderson, L. (1987) The State in the Middle East and North Africa, *Comparative Politics*, 20, (1) 1-19.
- Arab Monetary Fund (AMF), 2000, 2002, 2003 Annual Reports.
- Arab Oil & Gas Magazine (2004) Vol.XXXXI February. Page 18-19.
- Ashmawy, I. (1998) Foreign Direct Investment into Egypt and its Determinants, 1974-1995 with Particular Reference to the Attitude of the Multinational Corporations to the Egyptian Government's Investment Policy since 1989. university of Exeter. PhD Thesis.
- Asiedu, E. (2003) Foreign Direct Investment to Africa: The Role of Government Policy, Governance and Political Instability. Department of Economics, University of Kansas.
- Asiedu, E. (2005) Foreign Direct Investment in Africa: The Role of Natural Resources, Market Size, Government Policy, Institutions and Political Instability. Research Paper No. 24.
- Attiga, A. A. (1973) The Economic Impact of Oil on Libyan Agriculture, in O.A. et.al. (ed,) Libya: Agriculture and Economic Development, London: F. Cass, 9-18.
- ..... (1984) Al-Fatah is Revolution in The Oil Sector, Tripoli.
- Aziz, C. K. (1992) Economic Liberalisation in Oil-Exporting Countries: Iraq and Saudi Arabia, in I. Harik and D. Sullivan (eds) Privatisation and Liberalisation in the Middle East, 145-66.
- Bakar, M, M. and Russell, A. (1999) An analysis of Libya's revenue per barrel from crude oil upstream activities, 1961-93. Organization of the Petroleum Exporting Countries.
- Balasubramanyam, V. N and Mahambare, V. (2003) Foreign Direct Investment in India. Lancaster University Management School, The Department of Economics, Working Paper 001.
- Bandera, V. N. and White, J. T. (1968) US Direct Investments and Domestic Markets in Europe. *Economia Internazionale*, 21, 117-233.
- Baran, P.A. and Sweezy, P.M. (1966) Monopoly Capital, Penguin, Harmondsworth.
- Barkema, H., Bell, J. D., Pennings J., (1996) Foreign Entry, Cultural Barriers, and Learning, *Strategic Management Journal*, 17, 151-166.

## Bibliography

---

- Barker, P and McLachlan, K (1987) Development of the Libyan Oil Industry, in J.A. Allan (ed.) *Libya Since Independence*, 37-54.
- Barney, J B. (1986) Strategic factor markets: expectations, luck and business strategy.
- Barrell, R. and Pain, N. (1999) Trade Restraints and Japanese Direct Investment Flows', *European Economic Review*, 43: 2945.
- Basi, R. (1963) Determinants of US. Private Investment in Foreign Countries. Kent: Kent State University.
- Batra, R. N. and Hadar, J. (1979) Theory of the Multinational Firm: Fixed versus Floating Exchange Rates, *Oxford Economic Papers*, 258-69.
- Baumgarten, S. A. and Hausman, A. (2000) An Analysis of the Correlates of US Foreign Direct Investment in Latin America, *Journal of Transnational Management Development*, 5: 57-82.
- BBC News, January 2005. (US oil companies return to Libya). Last Updated: Sunday, 30 January, 2005, 04:31 GMT.  
<http://news.bbc.co.uk/2/hi/business/4219623.stm>).
- Becker, B. and Hall, G. S. (2003) Foreign Direct Investment in Industrial R&D and Exchange Rate Uncertainty in the UK. JEL classification: F31, L6, L16.
- Bell, J.H.J. (1996) Single or joint venturing?: a comprehensive approach to foreign entry mode choice. Aldershot: Avebury.
- Benacek, V. (2000) Prime Zahranicni Investice v Ceske Ekonomice', *Politicka Ekonomie*, 48: 7-24.
- Bénassy-Quéré, A., Fontagné, L. And Lahrière-Révil, A. (2001) Exchange-Rate Strategies In The Competition For Attracting Foreign Direct Investment. *Journal of The Japanese And International Economies*, 15: 178-198.
- Bénassy-Quéré, A., Fontagné, L. And Lahrière-Révil, A. (1999) Exchange rate Strategies in the Competition for Attracting FDI. CEPII, document de travail n° 99-16.
- Bénassy-Quéré, A., Fontagné, L. and Lahrière-Révil, A. (2003) Tax Competition and Foreign Direct Investment. CEPII, Working Paper No 2003-17.
- Bénassy-Quéré, A., Coupet, M. and Mayer, T. (2005) Institutional Determinants of Foreign Direct Investment. CEPII, Working Paper No 2005-05.
- Bennett, P. and Green (1972) Political Instability as a Determinant of Direct Foreign Investment in Marketing. *Journal of Marketing Research*, 9.

## Bibliography

---

- Bennett, R.B., Merchan, J.E. and Metcalfe, J.S. (1981) Motives for Australian Direct Foreign Investment, Working Paper No. 23, Bureau of Industry Economics, Canberra.
- Beschorner, Natasha and Smith, Andrew (1991) Libya in the 1990s: Can Its Resources Be Salvaged?. Special Report No. 2134. The Economist Intelligence Unit.
- Bevan, A. and Meyer, K (2000) Institution Building and the Integration of Eastern Europe in International Production. Working Paper 16/01.
- Bhattacharya, A. (2002) Environmental Technology Diffusion in a FDI Regime A developing Country Perspective. University of Mumbai, Department of Economics. Mumbai, India.
- Blomstrom, M., A. Kokko and M. Zejan, (1994) Host country competition, labour skills and technology transfer by multinationals. *Weltwirtschaftliches Archiv*, 130, 521-533.
- Blonigen, A. B. (2005) A Review of The Empirical Literature on FDI Determinants. NBER Working Paper Series, Working Paper 11299. National Bureau of Economic Research. Cambridge.
- Borenzstein, E., and De Gregorio, J. (1995). "How Does Foreign Direct Investment Affect Economic Growth", NBER Working Paper, N°5057.
- Borenztein, E., De Gregorio, J. and Lee, J. W. (1998) How does foreign direct investment affect economic growth, *Journal of International Economics*, 45, 115-135.
- Buckley, P J., and Casson, M (1991) The Future of the Multinational Enterprise London: Macmillan.
- Buckley, P.J. and Casson, M.C. (1976) The Future of the Multinational Enterprise, Homes & Meier: London.
- Buckley, P. J. & Casson, M. (1989) Multinational Enterprises in Less Developing Countries: Cultural and Economic Interactions. Discussion Papers in International Investment and Business Studies.
- Buckley, Peter J. and Pervez N. Ghauri (1999) The Internationalization of the Firm: A Reader (Second Edition), (London: International Thomson Business Press), 27-42.
- Burstein, A. (2003) Discussion of Ashoka Mody, Assaf Razin, and Efraim Sadka, "The Role of Information in Driving FDI Flows: Host-Country

- Transparency and Source-Country Specialization,” The North American Meeting of the Econometric Society, Washington D.C (January).
- Cantwell, J.A. (1991) The theory of technological competence and its application to international production in D. McFetridge (ed.) ‘Foreign Investment, Technology and Economic Growth’ University of Calgary Press, Calgary.
- Casson, Mark C. (1982) *The Entrepreneur: An Economic Theory*, Oxford.
- Caves, R. (1998) Industrial organization and new findings on the turnover and mobility of firms. *Journal of Economic Literature* 36, 1947-1982.
- Caves, R. E. (1982) *Multinational Enterprise and Economic Analysis* (Cambridge University Press).
- Caves, R.E. (1996) *Multinational Enterprise and Economic Analysis*, 2nd edition. Cambridge: Cambridge University Press.
- Central Bank of Libya, Economic Bulletin, Research and Statistic department 1980-2004.
- Chakrabarti, A. (2001) The Determinants of Foreign Direct Investment: Sensitivity Analyses of Cross-Country Regressions, *Kyklos*, 54, (1), 89-113.
- Chang, H.J. (2003) *Globalisation, Economic Development and the Role of the State*, London: Zed Books Ltd.
- Chein-Hsun, Chen (1996) Regional Determinants of Foreign Direct Investment in Mainland China. *Journal of Economics* 23, (2).
- Chemin, du. Champ (1997) Foreign Direct Investment, Development and the New Global Economic Order. A Policy Brief for the South was first published in November 1997 by the South Centre, Geneva-Switzerland.
- Cheng, L. K. and Kwan, Y. K. (2000) What Are the Determinants of the Location of Foreign Direct Investment? The Chinese Experience’, *Journal of International Economics*, 51: 379-400.
- Cleeve, E. (2000) Why Do Japanese Firms Locate in Particular British Regions?’ *Asia Pacific Journal of Economics and Business*, 4: 112-24.
- Clegg, J. (1998) The determinants of Intra-European FDI flows: market integration and policy issues, in J.L. Mucchielli, Peter J. Buckley and Victor V. Cordell. *Globalisation and Regionalisation: strategies, policies and economic environments*, New York: Haworth Press.
- Clegg, J. and Scott-Green, S. (1999) *The Determinants of New FDI Capital Flows*

- into the EC: A Statistical Comparison of the USA-and Japan, *Journal of Common Market Studies*, 37: 597-616.
- Coase, R. H. (1937) The Nature of the Firm. *Economica*, 4: 386-405.
- Collis, D. J (1991) A resource-based analysis of global competition: The case of the bearings industry. *In Strategic Management Journal*, 12, 49-68.
- Corporation For Investment (2004) Proposal For The Needed Policies And Legislations For Encouraging The Foreign Investment In Libya. Tripoli: The General Planning Council.
- Cushman, David O. (1985) Real Exchange Rate Risk, Expectations, And The Level of Direct Investment. *Review of Economics And Statistics*, 67: 297-308.
- Cushman, David O. (1988) Exchange-rate uncertainty and foreign direct investment in the United States, *Weltwirtschaftliches Archiv*, 124, 322-336.
- Dager, M (2004) The Libyan Private Sector between the Ownership and The Building. In Conference on The Privatisation in Libyan Economy. Benghazi: The Economic Research Centre.
- Dar, H. A., John R. Presley, Shahid H. Malik (2002) Determinants of FDI inflows to Pakistan (1970-2002) Loughborough University, Loughborough, UK.
- Das, S. P. (1999) Direct Foreign Investment Versus Licensing', *Review of Development Economics*, 3, 86-97.
- Davidson, H. W. (1979) The Location of Foreign Direct Investment Activity: Country Characteristics and Experience Effects. Dartmouth University.
- Davidson, W. H. (1987) Creating and managing joint ventures in China. *California Management Review*, 29(4th Quarter): 77-94.
- De Mello L.R. (1997) Foreign Direct Investment in Developing Countries and Growth: a Selective Survey", *Journal of Development Studies*, 34, (1), 1-34.
- Desai, M. and Hines, J. (2003) Economic Foundations of International Tax Rules. A paper prepared for the American Tax Policy Institute Washington D.C.
- Dickey, D., and Fuller, W. (1979) Distribution of the Estimators for Autoregressive Time Series with a Unit Root, *Journal of the American Statistical Association*, 74, 427-431.
- Don, B. (1992) Responses to Oil Booms and Busts: Rethinking the Rentier State, paper presented at the Conference on Oil Revenues and State Strategies in the Middle East, Harvard University, Center for Middle Eastern Studies, November 20-21.
- Don, H. (2002) Petroleum Geology of Libya. Elsevier Services B.V.

- Donnenfeld, S. and Weber, S. (2000) Exporting Versus Foreign Direct Investment, *Journal of Economic Integration*, 15, 100-126.
- Dorda, A. (2000) Letter passed on to Chairman of Security Council by Libyan Representative. Security Council, March 23.
- Drabek, Z. and Payne, W. (1999) The Impact of Transparency on Foreign Direct Investment. World Trade Organization Working Paper ERAD-99-02. WTO, Geneva.
- Dunning J. H. (1988) Explaining International Production, London: Unwin.
- Dunning J. H. (1993a) Multinational Enterprises and the Global Economy Workplan, Berkshire: Addison-Wesley.
- Dunning J. H., (1993b) The Globalisation of Business: The Challenge of the 1990s, London and New York: Routledge.
- Dunning, D., and Stern, L. B. (1994) Distinguishing accurate from inaccurate eyewitness identifications via inquiries about decision processes. *Journal of Personality & Social Psychology*, 67, 818-835.
- Dunning, J. (1986) Shrub-Steppe Birds Revisited: Implications For Community Theory. *Am. Nat.* 128: 82-98.
- Dunning, J. H. (1977) Trade, location of economic activity and the MNE: A search for an Eclectic Paradigm, in B. Ohlin, B. Hesselborn, P.O. and P.M. Wijkman, editors, The international allocation of economic activities, proceedings of a Nobel symposium in Stockholm. London: Macmillan.
- Dunning, J. H. (1980) The location of foreign direct investment activity, country characteristics and experience effects. *Journal of International Business Studies*, 9, 9-22.
- Dunning, J. H. (1981a) Explaining the international direct position of countries: towards a dynamic or developmental approach. *Weltwirtschaftliches Archiv* 1 (19), 30-64.
- Dunning, J. H. (1981b) International Production and the Multinational Enterprise, London and Boston. Allen & Unwin.
- Dunning, J. H. (1993a) The changing dynamics of international production. In J.H. Dunning, editor, The Globalization of Business. London and New York: Routledge.
- Dunning, J. H. (1993c) The Globalization of Business, Londres, Routledge.

- Dunning, J. H. (1995) Reappraising the Eclectic Paradigm in an Age of Alliance Capitalism. *Journal of International Business Studies*, 26 (3): 461-481.
- Dunning, J. H. and Dilyard, J. R. (1999) Towards a General Paradigm of Foreign Direct and Foreign Portfolio Investment', *Transnational Corporations*, 8: 1-52.
- Dunning, J.H. (1958) *American Investment in British Manufacturing Industry*, London: George Allen and Unwin. (New, revised and updated edition, London: Routledge, 1998).
- Dunning, J.H. (1972) The Location of International Firms in an Enlarged EEC. An Exploratory Paper. Manchester, Manchester Statistical Society.
- Dunning, J.H. (1973) The determinants of international production. *Oxford Economic Papers* 25 (3), 289-336.
- Dunning, J.H. (1988) The eclectic paradigm of international production: a restatement and some possible extensions. *Journal of International Business Studies*, 19 (1) 1-32.
- Dunning, J.H. (1998) Location and the multinational enterprise: a neglected factor, *Journal of International Business Studies*, 29 (1), 45-66.
- Dunning, J.H. (1999) Globalization and the theory of MNE activity, in Hood, N. and Young, S. (eds), *The Globalization of Multinational Enterprise Activity*, London.
- Dunning, J.H. (2000), The eclectic paradigm as an envelope for economic and business theories of MNE activity, *International Business Review*, 9 (1), 163-90.
- Dunning, J.H. and Narula R. (1996) *Foreign Direct Investment and Governments*. London and New York: Routledge.
- El-Fathaly, O. And Palmner, M (1980) *Political Development and Social Change in Libya*. Lexington Books.
- Elmaihub, H. S. (1981) *The Role of The Public Sector in Development Strategy: The Case of Libya*. University of Garyounis, Libya.
- Emmott, B. (1993) Japan's global reach (London, Arrow).  
empirical investigation of Japanese firms'', *Management International Review*,
- Energy Information Administration (eia) *Annual Energy Review*, 2002.



## Bibliography

---

- Engle, R., and Granger, C. W. J., (1987) Co-integration and error correction: Representation, estimation and testing. *Econometrica*, 55, (2) 251-276.
- Enterprise Ireland, (2004) Doing Business in the Arab World. A Guide for Irish Companies. A Guide for Irish Companies.
- Erdal, F. (2002) Locational Determinants of FDI in an Emerging Economy: Evidence from Turkey, *Multinational Business Review*, 10, (1).
- Eric, D. (1979) The Political Economy of the Arab Oil-Producing Nations: Convergence with Western Interests, *Studies in Comparative International*.
- Erramilli, M. K. and Rao, C. P. (1990) Choice of Foreign Market Entry Modes by Service Firms: Role of Market Knowledge, *Management International Review*, 30 (2), 135-150.
- Erramilli, M.K. (1991) The experience factor in foreign market entry behaviour of service firms. *Journal of International Business Studies*, 22 (3): 479-502.
- Erramilli, M.K. and Rao, C.P. (1993) Service firms' international entry-mode choice: a modified transaction-cost analysis approach'', *Journal of Marketing*, 57, (3), 19-38.
- Errunza, V., and Senbet, L. (1981) The effects of international operations on market value of the firm: theory and evidence, *Journal of Finance*, 36, 401-417.
- Essa, M. H. (1997) Macroeconometric Model of an Oil Based Economy: Case Study of Libya, Unpublished Thesis: Sheffield: University of Sheffield.
- Estrin, S. (1994) Privatisation in Eastern Europe (Longman: London).
- Fagre, N., & Wells, L.T. (1982) Bargaining power of multinationals and host governments. *Journal of International Business Studies*, 13(First Quarter): 1-22.
- Farah, G. M. (1991) Multinational Corporations in the Arabic World with Particular Reference to the Contribution of Industrial Joint Ventures to development in the Gulf Region. The University of West London. PhD thesis.
- Farley, Rawle (1971) Planning for Development in Libya: The Exceptional Economy in The- Developing World, NY Praeger Publishers.
- Fawat, I. (1985) Libya: Economic Crisis, Political Expulsions, *Afric Asia*, 22, 32-43.
- Fosfuri, A. and Motta, M. (1999) Multinationals without Advantages, *Scandinavian Journal of Economics*, 101: 617-30.
- Franko, L. G. (1971) Joint-Venture Survival in Multinational Corporations, New York:

Praeger.

- Froot, K. and Jeremy, C. S. (1991) Exchange Rates and Foreign Direct Investment: An Imperfect Capital Markets Approach, *Quarterly Journal of Economics*, 106, (4), 1191-1217.
- Fukao, K., Ishido, H. and Ito, K. (2003) Vertical Intra-Industry Trade and Foreign Direct Investment in East Asia. International Centre for the Study of East Asian Development. RIETI Discussion Paper Series 03-E-001. Revised Version.
- Fuller, W. (1976) Introduction to Statistical Time Series. New York, Wiley.
- Gandhi, R. (2002) Emerging Asia Investment Policy Dialogue. Exploratory Meeting. OECD, Shanghai.
- Gatignon H. and Anderson E. (1986) Modes of Foreign Entry: Transaction Costs and Propositions, *Journal of International Business Studies*, 17, 1-26.
- Gatignon, H., & Anderson, E. (1988) The multinational corporation's degree of control over foreign subsidiaries: an empirical test of a transaction cost explanation. *Journal of Law, Economics, and Organization*, 4(2): 305-36.
- Gazioglou, S. and McCausland, W. D. (2002) The Cost of Inward Direct Foreign Investment to Development Countries. Applied Economics Letters.
- Ghanem, S. (1985a) The Libyan Role within OPEC, in M. M. Buru, S. M. Ghanem, and K. S. McLachlan (eds.) Planning and Development in Modern Libya, 158- 177.
- Ghanem, S. (1985b) Changing Planning Policies in Libya, in M. M. Burn, S. M. Ghanem, and K. S. McLachlan (eds.) Planning and Development in Modern Libya, 220-29.
- Ghanem, S. M, M.M. Buru, K.S. McLACHLAN. (1985) Planning and Development in Modern Libya. The Society for Libyan Studies. Middle East & North African Studies press limited.
- Gharaibeh, A. M. O. (1997) Foreign Direct Investment Incentives: the case of Jordan. Accounting and Finance, The University of Hull. Ph.D Thesis.
- Ghattour, M. (2000) Doing Business in Libya.
- Ghattour, M. (2001) Foreign National Working in Libya.
- Ghattour, M. (2004) Doing Business With Libya. Sponsored By: Bank of Valletta.
- Giacomo, L. (1984) The Oil Companies And The Arab World. London: Croom Helm.

- Giedion, U. and Steiner, R. (1995) Characteristics, Determinants and Effects of Foreign Direct Investment in Colombia”, in: M.R. Agosin (ed.) Foreign Direct Investment in Latin America, BID - Universidad de Chile, Washington D.C.
- Giurnaz, A. (1985) Economics of Oil: A case study of Libya. University of Keele. PhD thesis.
- Globerman, S. and Shapiro, D. M. (1999) The Impact of Government Policies on Foreign Direct Investment: The Canadian Experience, *Journal of International Business Studies*, 30: 513-32.
- Goldberg, L. S. and Klein, M. W. (1997) Foreign Direct Investment, Trade and Real Exchange Rate Linkages in Southeast Asia and Latin America’, NBER Working Paper No. 6344.
- Goldberger, M. A. (1972) The determinants of U.S Direct Investment in the EEC: Comment” *American Economic Review*, 62: 692-699.
- Gomes-Casseres, B. (1989) Ownership structures of foreign subsidiaries”, *Journal of Economic Behaviour and Organization*, 2, 1-25.
- Gomes-Casseres, B. (1990) Firm ownership preferences and host government restrictions: an integrated approach”, *Journal of International Business Studies*, 1st quarter, 1-24.
- Gopinath (2001) For a different application of a search model for a study of FDI flows into developing economies.
- Grabher, G. (1993) Rediscovering the social in the economics of inter firm relations, in GRABHER, G. (Ed.) The embedded firm. On the socioeconomics of industrial networks, London, Routledge.
- Gray, H. P. (2000) Globalization and Economic Development, *Global Economy Quarterly*, 1: 71-96.
- Green, R. and Cunningham. W (1975) The Determinants of U.S. Foreign Investment: an Empirical Examination. *Management International Review* 15: 113-20.
- Guimaraes, P., Figueiredo, O., and Woodward, D. (2000) Agglomeration and the Location of Foreign Direct Investment in Portugal, *Journal of Urban Economics*, 47: 115-35.
- Gyapong, A. O. and Karikari, I. A. (1999) Direct Foreign Investment and Economic Performance in Ghana and Ivory Coast’, *Journal of Economic Development*, 24: 133-46.

- Hakim, C. (1992) Research design: strategies and choices in the design of social research. Contemporary social research series; 13. London: Routledge.
- Hakkala, K, Norbäck, P. and Svaleryd, H (2005) Asymmetric Effects of Corruption on FDI: Evidence from Swedish Multinational Firms. Working Paper No. 641.
- Halazoun, S. (2004) Transparency and Accountability in the Public Sector in the Arab Region. Key Public Sector Institutions in the Arab Region Responding to Globalization and Promoting Investment. Concept Paper 1. March 2004.
- Hall, R. W. (1986) Preference and suitability of elms for adult elm leaf beetle, *anthogaleruca luteola* (Coleoptera: Chrysomelidae). *Environ. Entomol.* 15: 143–146.
- Ham, A. (2002) Libya. Lonely Planet. Libya Lonely Planet Publications, ISBN: 0864426992
- Harrigan, K. (1985) Strategies for joint ventures. Lexington, MA: Lexington Books.
- Harris G. R and Schmitt, N (1999) Strategic Export Policy with Foreign Direct Investment and Import Substitution. Department of Economics, Simon Fraser University. Department of Economics, Simon Fraser University.
- Haufler, A. and Wooton, I. (2003) Regional Tax Coordination and Foreign Direct Investment. Department of Economics, University of Munich. Discussion paper 17.
- Hausmann, R. and Fernández-Arias, E. (2000) Foreign Direct Investment: Good Cholesterol?. Prepared for the Seminar, The New Wave of Capital Inflows: Sea Change or Just Another Tide? Annual Meeting of the Board of Governors, Inter-American Development Bank and Inter-American Investment Corporation New Orleans.
- Henderson, G. (2002) "Libya: old habits die hard," *Middle East International*, December, 20 (26).
- Hennart, J. F. (1991) The transaction cost theory of joint ventures: an empirical study of Japanese subsidiaries in the United States. *Management Science*, 37(4): 483-497.
- Hill, C.W.L., Hwang. P. and Kim, W.C (1990) An Eclectic Theory of the Choice of International Entry Mode, *Strategic Management Journal* 11(2): 117-128.
- Hirsch, S. (1967) Location of industries and international competitiveness. Oxford, UK: Oxford University Press.
- Holloway, I. (1997) Basic Concepts for Qualitative. London: Blackwell Science.

- Hood, N. and Young, S (1979) *The Economics of Multinational Enterprise*, Longman: Harlow.
- Horst, T. (1972) Firm and industry determinants of the decision to invest abroad." *Review of Economics and Statistics* 54, 37-45.
- Hudanah, A.B (2004) The characteristics of Libyan Industrial Sector and the Possibilities of the success of privatisation. In Conference on The Privatisation in Libyan Economy. Benghazi: The Economic Research Centre.
- Hufbauer, G.C. (1966), *Synthetic Materials and the Theory of International Trade*. Duckworth, London.
- Hymer, S. (1972) The Multinational Corporation and the Law of Uneven Development, in Ja. Bhagwati (ed.), *Economics and World Order*. New York: Macmillan.
- Hymer, S. H. (1976 [1960 as a thesis]) *The International Operations of National Firms: A Study of Direct Foreign Investment* (Cambridge, Mass.: MIT Press).
- Ihrig, J. (2000) Multinationals Response to Repatriation Restrictions, *Journal of Economic Dynamics and Control*, 24: 1345-79.
- IMF (2005) Socialist People's Libyan Arab Jamahiriya 2004 Article IV Consultation—Staff Report; Staff Statement; and Public Information Notice on the Executive Board Discussion.
- IMF (2005) Executive Board Concludes Article IV Consultation with The Socialist People's Libyan Arab Jamahiriya. Public Information Notice (PIN) No. 05/28
- Inter-Arab Investment Guarantee Corporation (2004) Year No. 22, second issue.
- Inter-Arab Investment Guarantee Corporation (2005) Year No. 23, first & second issue.
- International Monetary Fund (IMF), 1981-2004 Balance of Payments Yearbooks. Direction of Trade Statistics, International Finance Statistics.
- Jahangir, A. (1982) Oil Wealth: A Very Mixed Blessing, *Foreign Affairs* 60 (4), 814-35.
- Joffe, E.G. H. and McLACHLAN (1982) *Social and Economic Development of Libya*, Boulder. Westview Press.
- Johanson, J. and Vahlne, J.-E. (1977) The Internationalization Process of the Firm – a Model of Knowledge Development and Increasing Foreign Market Commitments. *Journal of International Business Studies*, 8, 23-32.

## Bibliography

---

- Johanson, Jan and Wiedersheim-Paul, Finn (1975) The internationalization of the firm: Four Swedish Cases", *Journal of Management Studies*, October, 305-322.
- Jonathan, Bearmajn (1986) Qadhafi's Libya, London: Zed Books.
- Jorgenson, Dale, W. (1963) Capital Theory and Investment Behaviour, *The American Eco Review*, LIII (2).
- Juhl, P. (1979) On the sectoral patterns of west german manufacturing investment in less developed countries: the impact of firm size, factor intensities, and protection, *Weltwirtschaftliches Archiv*, 115, (3) 508-519.
- Kadhim, J. M. (1998) investment strategy in an oil-surplus economy: the case of Bahrain. University of Keele. Master of Art dissertation.
- Kaewsumrit, I. (2004) The Effect of Tax Sparing Credit on Foreign Direct Investment. Ponlapat Department of Economics, University of Houston.
- Kai, C. and Toubal, F. (2003) Foreign Direct Investment in Central and Eastern European Countries: A Dynamic Panel Analysis. Kiel Working Paper No.1143.
- Kandiero, T. and Chitiga, M. (2003) Trade Openness And Foreign Direct Investment In Africa. Department Of Economics, University Of Pretoria. Annual Conference, Cape Town, South Africa.
- Katzman, K. (2005) The Iran-Libya Sanctions Act (ILSA). Order Code RS20871. Updated April 19, 2005. Congressional Research Service. The Library of Congress.
- Khader, B. and El-Wifati, B. (1987) (eds.) The Economic Development of Libya, London: Croom Helm.
- Khaled H. and Ali (2004) Changes in Libyan Foreign Policy, 'AL-Siyassa Al-Dawliya' The International Politics Journal. Cairo, Issue No 201, April.
- Khalil, A. M. (2000) European Business Interests in Lebanon: An Assessment of EU private foreign direct investment in the reconstruction Era. University of Durham. PhD thesis.
- Kindleberger, C. P. (1969) American Business Abroad: Six lectures on direct investment, New Haven: Yale University Press.
- Kinoshita, Y. (1998) Firm Size and Determinants of Foreign Direct Investment. JEL classification: F23, L60, O53. Prague, Czech Republic.
- Kiyamaz, K. and Taylor, L (2000) Competition for Foreign Direct Investment when Countries are not Sure of Site Values, *International Review of Economics and Finance*, 9: 53-68.

- Knickerbocker F. T. (1973) *Oligopolistic Reaction and the Multinational Enterprise*. Graduate School of Business Administration, Harvard University: Boston MA.
- Kobrin, J. S. (1976) The Environmental Determinants of Foreign Direct Investment: An Ex-Post Empirical Analysis. *The Journal of International Business Studies* 7, (2): 29-42.
- Kobrin J. S. (2005) The Determinants of Liberalization of FDI Policy in Developing Countries: A Cross-Sectional Analysis, 1992-2001. Forthcoming in *Transnational Corporations*, April 14, (1).
- Kogut, B. (1988) Joint ventures: Theoretical and empirical perspectives. *Strategic Management Journal*, 9: 319-332.
- Kogut, B. and Kulatilaka, N. (1994) Operating Flexibility, Global Manufacturing, and the Option Value of a Multinational Network. *Management Science*, 40:123-139.
- Kogut, B. and Singh, H., (1988) The Effect of National Culture on the Choice of Entry Mode. *Journal of International Business Studies* 19(3): 411- 432.
- Kohlhagen, S. W. (1977) The effects of exchange-rate adjustments on international investment: Comment. In *The Effects of Exchange Rate Adjustments*, Peter B. Clark, Dennis E. Logue and Richard James Sweeney, editors, Washington, DC: US Government Printing Office: 194-7.
- Kohpaiboon, A. (2002) *Foreign Trade Regime and FDI-Growth Nexus : A Case Study of Thailand*. Ph D Scholar, Division of Economics Research. School of Pacific and Asian Studies Australian National University.
- Kojima, Kiyoshi (1973) A Macroeconomic Approach to Foreign Direct Investment. *Hitotsubashi Journal of Economics* 14: 1-21.
- Kolstad, I. and Tøndel, L. (2002) *Social development and foreign direct investment in developing countries*, CMI report R 11, Bergen: Chr. Michelsen Institute.
- Kolstad, I. and Villanger, E. (2004) *How does social development affect FDI and domestic investment?*. Chr. Michelsen Institute Development Studies and Human Rights.
- Konishi, H., Saggi, K. and Weber, S. (1999) Endogenous Trade Policy under Foreign Direct Investment, *Journal of International Economics* 59, (2): 289-408.
- Kosteletou, N. and Liargovas, P. (2000) Foreign Direct Investment and Real Exchange Rate Interlinkages, *Open Economies Review*, 11: 135-48.

- Kravis, I. B. and Lipsey, E. R. (1982) The location of overseas production and production for export by US multinational firms." *Journal of International Economics* 12, 201-23.
- Kreinin, M. E., Abe, S. and Pluinmer, M. (1999) Motives for Japanese FDI: Survey, Analysis and Implications in Light of the Asian Crisis', *Journal of Asian Economics*, 10: 385-94.
- Krugman, P. (1991) *Geography and Trade*, Cambridge, MA.: MIT Press.
- Kudrle, R. T. (1995) Canada's Foreign Investment Review Agency and United States Direct Investment in Canada." *Transnational Corporations*, 4, (2): 58-91.
- Kumar, V., & Subramaniam, V. (1997) A contingency framework for the mode of entry decision. *Journal of World Business*, 32 (Spring): 53-72.
- Labvotiz, S. and Hagedorn, R (1981) *Introduction to Social Research*. New York. McGraw Hill Book Company.
- Layard R., and Blanchard, O., (1992), How to Privatiser, in *The Transformation of Socialist Economies*, ed. Horst Siebert (Tubingen, Germany: Mohr [Siebeck]), 27-44.
- Lecraw, D. J. (1984) Bargaining power, ownership and profitability of transnational corporations in developing countries. *Journal of International Business Studies*, 15 (Spring-Summer): 27-43.
- Lehmann, A. (1999) Country Risk and the Investment Activity of US. Multinationals in Developing Countries, International Monetary Fund Working Paper No. WP/99/133, October.
- Levine, R. and Renelt, D. (1992) A sensitivity analysis of cross-country regressions", *American economic review*, 82, (4), 942-63.
- Libyan Foreign Investment Board, Symposium on Prospects of International, Investment and Trade in The Great Jamahiria, Tripoli 2-3/9/1999. [www.investinlibya.com](http://www.investinlibya.com)
- Libyan Investment Annual Reports 1999-2004.
- Lim, D. (1983) Fiscal Incentives and Direct Foreign Investment flows in Less Developed Countries", *Journal of Development Studies*, 42, 207-12.
- Lim, E.G. (2001) Determinants of, and the Relation Between, Foreign Direct Investment and Growth: A Summary of the Recent Literature. IMF Working Paper WP/01/175 Washington, DC.
- Lipsey, R. E., (1999) The Role of Foreign Direct Investment in International Capital Flows, NBER Working Paper No.7094.



## Bibliography

---

- List, I. A. and Co, C. Y. (2000) The Effects of Environmental Regulations on Foreign Direct Investment', *Journal of Environmental Economics*.
- Liu, Z. and Stares, S. (1997) Motorization in Chinese Cities: Issues and Actions', in China's Urban Transport Development Strategy, The World Bank Discussion Paper No. 352, Washington, D.C.: The World Bank.
- Lizondo, S. (1991) Foreign Direct Investment. IMF Occasional Paper, No.77, 68-82.
- Logue, D. E. and Willet, T. D. (1977) The effects of exchange-rate adjustments on international investment. In The Effects of Exchange Rate Adjustments, Peter B. Clark, Dennis E. Logue and Richard James Sweeney, editors, Washington, DC: US Government Printing Office: 137- 50.
- Lowell, F. (2003) Libya: An analysis in Bianci, Steven (ed), Libya: Current Issues and Historical Background. New York: Hauppauge.
- Luostarinen R. (1980) Internationalization of the Firm. Helsinki School of Economics: Helsinki, Finland.
- Lycett, A. (1990) Libya. In: World of Information, (editor). The Middle East Review: The Economic Business Report. 16 ed. Edison: Hunter Publishing inc, 101-4.
- Mabro, P. (1988) The 1986 Oil Price Crisis: Economic Effects and Policy Responses, Oxford: Oxford University Press.
- Macfarlane, T. V. (1999) Practical introduction to statistical data analysis using SPSS. Rossendale : Eden Bianchi.
- Maddala. G.S (1992) Introduction to Econometrics. Second Edition. University of Florida and Ohio State University.
- Madhok, A. (1995) Revisiting multinational firms' tolerance for joint ventures: A trust-based approach. *Journal of International Business Studies*, 26, 117-137.
- Majid K. (1968) Modern Libya; A study in Political Development. The Johns Hopkins Press. Baltimore.
- Makola, M. (2003) The Attraction Of The Foreign Direct Investment (FDI) By The African Countries. Biennial Essa Conference: Sommerset West: Cape Town, 17-19 September.
- Mamarinta Mababaya (2002) The Role of Multinational Companies in The Middle East: The Case of Saudi Arabia. Westminster Business School. Department of Economics & Quantitative Methods. University of Westminster London. PhD Thesis.

## Bibliography

---

- Manion, L. and Cohen, L. (1994). *Research Methods in Education* Fourth Edition, London, Routledge.
- Marinov, M. A. and Marinova, S. T. (1999) Foreign Direct Investment Motives and Marketing Strategies in Central and Eastern Europe', *Journal of East-West Business*, 5: 25-55.
- Martin, P. and Ottaviano, O. L. P. (1999) Growth Locations: Industry Location in a Model of Endogenous Growth', *European Economic Review*, 43: 281-302.
- Martin, W. and Yanagashima, K. (1993) Concerted Trade Liberalization and Economic Development in the Asia-Pacific Region," background paper for East Asia's Trade and Investment, World Bank, International Economics Department, Washington, D.C.
- Mascarenhas, B. (1986) International Strategies of Non-Dominant Firms," *Journal of International Business Studies*," Spring: 1-25.
- McManus, C. (1972) The Theory of the International Firm', in O. Pacquet (ed.), *The Multinational Firm and the Nation State* (Gait, Ontario: Collier- Macmillan).
- McMillan, S. (1995) Foreign Direct Investment in Ghana and Cote d'Ivoire." In *Foreign Direct Investment in a Changing Global Economy*, ed. Steve Chan. New York: St. Martin's Press.
- McMillin, W. (1991) The velocity of M1 in the 1980s: Evidence from a multivariate Time series model. *Southern Economic Journal* 57, 711-648.
- MEED (Middle East Business News & Information), 11 February 1994:26.
- Mehmet, Ö. (2002) Attracting Foreign Direct Investment For Russia's Modernization: Battling Against The Odds. OECD. Russia Investment Roundtable Saint Petersburg, Russia.
- Meldrum, D. H. (2000) Country risk and foreign direct investment. *Business Economics*, January, 33 – 40.
- Mellahi, K., C, Guermat, Frynas, G., and Al-Bortamani, H. (2002) Motives for Foreign Direct Investment in Gulf Cooperation Countries: The Case of Oman.
- Metz, H. C. (1988) *Libya: a country study*, Federal Research Division, Library of Congress, Washington, D.C. U.S. Government Area Handbook Series.
- Metz, H. C. (2003) *Libya: a country study* in Bianci, Steven, *Libya: Current Issues and Historical Background*. New York: Hauppauge.

## Bibliography

---

- Meyer, K. (1998) *Direct Investment in Economies in Transition*. Massachusetts: Edward Elgar Publishing.
- Middle East Economic Survey (MEES), 1990.
- Millner, H. V. (1999) The political economy of international trade, *Annual Review of Political Science*, 2, 91-114.
- Ministry of oil, (1972) *Libyan oil: 1954-1971*, Tripoli, Libyan Arab Republic
- Ministry of Planning Annual Reports 1964-1975.
- Mirza, H; Giroud, A., Wee, Kee Hwee; and Frank Bartels (1998) *The Investment Strategies of Asian and Non-Asian Firms in ASEAN*, paper presented at the LVMH Conference, Asian Foreign Investment in Asia, 6-7 April, INSEAD Euro-Asia Centre, Fontainebleau.
- Mockler, R.J., & Dologite, D.G. (1997) *Multinational cross-cultural management: an integrative context-specific process*. Westport: Quorum Books.
- Mody, A., Dasgupta, S. and Sinha, S. (1999) Japanese Multinationals in Asia: Driven and Attractors, *Oxford Development Studies*, 27:149-64.
- Montiel, P. and Reinhart, C. M. (1999) Do Capital Controls and Macroeconomic Policies Influence the Volume and Composition of Capital Flows? Evidence from the 1990.', *Journal of International Money and Finance*, 18: 619-35.
- Moore, M. O. (1993) Determinants of German Manufacturing Direct Investment in Manufacturing Industries." *Weltwirtschaftliches Archiv*, 129, 120-37.
- Moosa, I. A. (2002) *Foreign Direct Investment Theory, Evidence and Practice*. Houndmills, Basingstoke, Hampshire, New York: Palgrave.
- Moshirian, F. (2001) International Investment in Financial Services', *Journal of Banking and Finance*, 25: 317-37.
- Mudd, S. and Edmiston, K. and Valev, N. (2003) *Tax Structures and FDI The Deterrent Effects of Complexity and Uncertainty*. Georgia State University Thunderbird, The American Graduate School of International Management Georgia State University.
- Mundell, R. (1957) International Trade and Factor Mobility, *American Economic Review* 47: 321-35.
- Mutinelli, M. and L. Piscitello (1998a) The entry mode choice of MNEs: an evolutionary approach", *Research Policy*, 27, 491-506.

## Bibliography

---

- National Academy for Scientific Research (NASR).
- National Corporation for Information and Documentations (NCID), 2000 & 2003.
- National Oil Corporation (NOC), 1982-2004.
- Ngowi, P. H. (2001) Tax Incentives for foreign Direct Investment (FDI): types and Who Should/Should not Qualify in Tanzania. *The Tanzant Journal* 1 (1): 19-28.
- Niblock, T (2001) Pariah States and Sanctions in the Middle East, London, Lynne Rinner.
- NOC, (1962) Libyan Oil 1954-1961, Tripoli, Republic of Libya.
- NOC, (1989) Al-Boury magazine issue No.58, Tripoli.
- Nore, P and Turner, T. (eds) (1980) Oil and Class Struggle, London: Zed Press.FIRST, Ruth Libya: Class and State in an Oil Economy.
- OAPEC, Annual Statistical Report 1995, 1999, 2003 and 2003.
- O'Grady, S. & Lane, H. (1996) The psychic distance paradox. *Journal of International Business Studies*, 27: 309-334.
- O'Sullivan, P. J. (1993) An Assessment of Ireland's Export-Led Growth Strategy Via Foreign Direct Investment: 1960-80, *Weltwirtschaftliches Archiv*, 129, 139-158.
- OECD (2004) Economic Survey of Turkey. Policy Brief 2004.
- Okposin, S. B. (1999) The Extent of Singapore's Investments Abes.d (Sydney: Ashgate).
- Oleksiv, M. (2000) The Determinants of FDI: Can Tax Holiday compensate for weak Fundamentals? Case of Ukraine.
- Omran, M. and Bolbol, A. (2003) Foreign direct investment, financial development, and economic growth: evidence from the Arab countries. *Review of Middle East Finance*, 1 (3) 231-249.
- OPEC, Annual Statistical Bulletin 1981-2004.
- Oppenheim, A. N. (1992) Questionnaire design, interviewing and attitude measurement. London: Continuum.
- Organization of Arab Petroleum Exporting Countries (OAPEC). Annul Statistical Reports 2001 and 2003.

- Orr, P. (1975) The Industrial Composition of U.S. Exports and Subsidiary Sales to the Canadian Market: Comment. *American Economic Review*, 65, (1), 230-234.
- Padmanabhan, P., & Cho, R.K. (1996) Ownership strategy for a foreign affiliate: an empirical investigation of Japanese firms. *Management International Review*, 36, (1), 45-65.
- Page, J., Little, I. M. D., and Mazumdar, D. (1987) *Small Manufacturing Enterprises: A Comparative Study of India and Other Economies*. New York: Oxford University Press.
- Pallant, J. (2005) *SPSS Survival Manual*. 2<sup>nd</sup> edition. A step by step guide to data analysis using SPSS version 12.
- Persaud, B. & Cable V. (1987) *Developing with foreign investment*. London: Croom Helm.
- Peter Kennedy, Simon (1985) *A Guide to Econometrics*. Second Edition. Simon Fraser University. Basil Blackwell.
- Peteraf, M. A. (1993) The Cornerstones of Competitive Advantage: A Resource-based View, *Strategic Management Journal* 14 (3), 179-191.
- Petrochilos, G.A. (1989) *Foreign Direct Investment and the Development Process: The Case of Greece*, Anebury, Cower Publishing Company Ltd.
- Phillips, A. J. (2001) Lockerbie Verdict Vindicates Continued Sanctions Against Libya. Executive Memorandum #718.
- Pistoresi, B. (2000) Foreign Direct Investment and Factor Localization: Latin America and South East Asia. *Rivista di Politica Economica*, 90: 27-44.
- Pitelis, C. (2000) A Theory of the (Growth of the) Transnational Firm: A Penrosean Perspective', *Contributions to Political Economy*, 19: 71-89.
- Pontus, B. and Roger, S. (1996) Host country characteristics and agglomeration in foreign direct investment: Applied Economics.
- Porter, M.E. (1990) *The Competitive Advantage of Nations*. London: Macmillan.
- Posner, M. (1961) International Trade and Technical Change. *Oxford Economic Papers*, 13, 323-341.
- Ramcharan, H. (1999) Foreign Direct Investment and Country Risk: Further Empirical Evidence', *Global Economic Review*, 28: 49-59.
- Razin, A. and Mody, A. and Sadka, E. (2003) The Role of Information in Driving FDI Flows: Host-Country Transparency and Source-Country Specialization.

## Bibliography

---

- Razin, A. and Sadka, E. (2004) FDI Flows: The Role of Transparency and Specialization.
- Resminj, L. (2000) The Determinants of Foreign Direct Investment in the CEECs: New Evidence from Sectoral Patterns', *Economics of Transition*, 8: 665-89.
- Reuber, G.L., Crookell, H., Emerson, M. and Gallais-Hamonno, G. (1973) *Private Foreign Investment in Development*, Oxford: Clarendon Press.
- Rivlin, P. (2001) *Economic Policy and Performance in the Arab World*. Colorado: Lynne Rienner Publishers.
- Robert, C. Kelly. (2003) *Libya, 2003 Country Review*. Country Watch.
- Robson, M. and Radulescu, R. (2003) Does Strict Employment Protection Legislation Deter FDI? Newcastle University Business School, University of Newcastle upon Tyne and Department of Economics and Finance, University of Durham.
- Root, F. R. (1994) *Entry strategies for international markets*. San Francisco: Lexington Books.
- Roubini, N. and Setser, B (2005) *China Trip Report*. Stern School of Business New York University, RGE and the Global Economic Governance Programme, University College, Oxford.
- Rugman, A. (1979) *International Diversification and the Multinational Enterprise*, Lexington Books, Lexington.
- Rugman, A. (1986) New Theories of the Multinational Enterprise: an Assessment of the Internalisation Theory, *Bulletin of Economic Research*, 38, 101-118.
- Rugman, A. M. (1982) *Internationalization and non-equity forms of international Enterprise* (pp.9-23). New York: St. Martin's Press.
- Russo, P. (2004) *Policies For Business In The Mediterranean Countries: Great Arab Popular ocialist Lybian Jamahyria*. c/o Formez- Centro Formazione Studi Viale Campi Flegrei, 34. Italy.
- Ruth, F. (1980) *Libya: Class and State in an Oil Economy*, in P. Nore and T. Turner (eds) *Oil and Class Struggle*, London: Zed Press.
- Sadik A, T. and Bolbol, A. A. (2000) *Mobilizing International Capital foe Arab Economic Development: With Special Reference to the Role of FDI*. Arab Monetary Fund, Economic Policy Institute, Abu Dhabi, United Arab Emirates.
- Sala-i-Martin, Xavier, and Artadi, E. V., (2003) *Economic Growth and Investment in the Arab World*, World Economic Forum, Arab Competitiveness Report, 22-33.

## Bibliography

---

- Salam, A, Y (2003) The Foreign Investment Obstacles in the Libyan Economy, Paper presented in Conference on The Investment in the Libyan Economy. Benghazi: University of Garyounis, 27<sup>th</sup> –29<sup>th</sup> May.
- Sanford, D. M. and Dong, H. (2000) Investment in Familiar Territory: Tourism and New Foreign Direct Investment', *Towum Economics*, 6: 205-19.
- Scaperlanda, A. E. and Mauer, L. (1969) The determinants of US direct investment in the EEC, *American Economic Review*, 59.
- Schoeman, N. L, Robinson, L. C. and de-Wet, T. 3. (2000) Foreign Direct Investment Flows and Fiscal Discipline in South Africa, Saud, Ajlican *Journal of Economic and Management Sciences*, 3:235-44.
- Schreiber, J.S. (1970) US Corporate Investment in Taiwan, Cambridge University Press: Cambridge.
- Segal, R. (1974) Libya the Elusive Revolution. Ruth First. Penguin African Library.
- Sheridan J. Coakes & Lyndall G. Streed (2001) SPSS Analysis Without Anguish. Version 10.0 For Windows. John Wiley & Sons Australia, Ltd.
- Sekaran, Uma (1992) Research methods for business: a skill building approach. 2<sup>nd</sup> Addition. New York; Chichester: Wiley
- Sekkat, K and Varoudakis, M (2004) Trade and Foreign Exchange Liberalization, Investment Climate, and FDI in the MENA Countries. World Bank, Washington.
- Shah, S. M. S. and Toye, J. F. J. (1978) Fiscal Incentives for Firms in Some Developing Countries: Survey and Critique." In Taxation and Economic Development, eds. J.M.J. Toye. London: Frank Cass.
- Shane, S. (1993) The effect of culture difference in perceptions of transactions costs on national differences in the preference for international joint ventures. Asia.
- Shenkar, O and Yadong, L. (2003) Foreign Direct Investment Theory and Application: International Business, Chapter 3.
- Sheridan J. C. & Streed, L. G. (2001) SPSS Analysis Without Anguish. Version 10.0 For Windows. John Wiley & Sons Australia, Ltd.
- Simons, G. (2003) Libya and the West: From Independence to Lockerbie, Oxford: Center for Libyan Studies.
- Sin, C. Y. and Leung, W. F. (2001) Impacts of FDI Liberalization on Investment Inflows, *Applied Economics Letters*, 8:253-6.

- Singh, H. and Jun, K.W. (1995) New evidence on determinants of FDI in developing countries, a policy research working paper # 1531, World Bank.
- Stallings, B. (2003) Globalization and Liberalization: The impact on developing countries in KOHLI, A, Moon, C and Sorensen, G (eds.) States, markets, and just growth: Development in the twenty-first century, New York: United Nations University Press.
- Stern, M. R (2000) Quantifying Barriers To Trade In Services University Of Michigan, School Of Public Policy. Research Seminar In International Economics. Discussion Paper No. 470.
- Stevens, G. (1969) U.S. direct manufacturing investment to Latin America: Some economic and political determinants. *Yale Economic Essays* 9: 137-99.
- Stevens, Guy V.G. (1977) The effects of exchange-rate adjustments on international investment: Comment. In *The Effects of Exchange Rate Adjustments*, Peter B. Clark, Dennis E. Logue and Richard James Sweeney, editors, Washington, DC: US Government Printing Office: 183-88.
- Stevens, V. G. (1993) Exchange rates and foreign direct investment: A note. *International Finance Discussion Papers*, Washington, DC: Board of Governors of the Federal Reserve System, April, number 444.
- Stopford, J. M. & Wells, L. T. (1972) *Managing the Multinational enter prise*. New York: Basic Books.
- Streeten, P. (1993) The Special Problems of Small Countries, *World Development*, 21(2):197-202.
- Sung, H. and Lapan, H. B. (2000) Strategic Foreign Direct Investment and Exchange Rate Uncertainty', *International Economic Review*, 41: 411-23.
- Tajudeen, O. L. (1995) Balancing the Hazard of Political Risk Against Foreign Direct Investment in the Petroleum Sector of Less Developed Countries. Dissertation is submitted to the Centre for Petroleum and Mineral Law and Policy, University of Dundee.
- The Economic Research Centre Benghazi (2000 and 2002), Conference, Benghazi-Libya.
- The Economic Research Centre Benghazi (2002), Conference, Benghazi-Libya.
- The Economist Intelligence Unit (EIU), Libya Country Profile 1980-2003.
- The Reuter Library Report (1993), 16 August.



- Thomas, E. (1961) The Libyan Oil Worker, *The Middle East Journal*, 15: 264-76.
- Thompson, E. R. and Poon, J. P. H. (2000) ASEAN after the financial crisis, *ASEAN Economic Bulletin*. 17(1), 1-14.
- Thompson, E. R. and Poon, J. P. H. (2000) Investment attractiveness of East Asia to North American firms, *International Trade Journal*. 14 (4) 421-439.
- Thomsen, S. and Woolcock, S. (1993) Direct Investment and European Integration: Competition Among Firms and Governments, Pinter Publishers, London.
- Thunell, L. (1977) Political Risks in International Business. New York. London, Praeger Publishers.
- Townsend, D. (1999) Oil & Gas opportunities in Libya. Volume One, Global Energy Intelligence, UK.
- Townsend, D. (2001) Oil & Gas Opportunities in Libya. Volume Two. CWC.
- Traxler, F. and Woitech., B. (2000) Transnational Investment and National Labour Market Regimes: A Case of 'Regime Shopping'?, *European Journal of Industrial Relations*, 6 (2), 141-159.
- Tsai, P. (1994a) Determinants of Foreign direct Investment and Its Impact on Economic Growth, *Journal of Economic Development*, 19.
- Tse, D. K., Pan, Y., and Au, K.Y. (1997) How MNCs choose entry modes and form alliance: the China experience. *Journal of International Business Studies*. 28 (4): 779-806.
- Tuman, J., and Emmert, C. (1999) Explaining Japanese Foreign Direct Investment in Latin America, 1979-1992. *Social Science Quarterly* 80 (3) 539-55.
- UNCTAD (2000), World Investment Report, UNCTAD, Geneva.
- United Nations Conference on Trade and Development (UNCTAD) (1994). World Investment Report 1993: Transnational Corporations and Integrated International Production (New York: United Nations).
- \_\_\_\_\_ (1999). World Investment Report 1999: Foreign Direct Investment and the Challenge of Development (New York and Geneva: United Nations).
- \_\_\_\_\_ (2001). World Investment Report 2001: Promoting Linkages (New York and Geneva: United Nations).

- \_\_\_\_\_ (2002). World Investment Report 2002: Transnational Corporations and export Competitiveness (New York and Geneva: United Nations).
- \_\_\_\_\_ (2003). World Investment Report 2003: FDI Policies for Development: National and International Perspectives (New York and Geneva: United Nations).
- \_\_\_\_\_ (2004). Foreign direct investment data base UNCTAD [cited 12 February 2004]. Available from <http://www.unctad.org/Templates/Page.asp?intItemID=1890&lang=1>.
- United Nations (2004) Prospects for Foreign Direct Investment and the Strategies of Transnational Corporations, 2004-2007. New York and Geneva.
- United Nations Centre on Transnational Corporations (UNCTC) (1991). Government Policies and Foreign Direct Investment (New York: United Nations).
- U.S. Department of State, (2005) Doing Business in Libya: A USLO Country Commercial Guide. International Copyright All Rights Reserved Outside of The United States.
- U.S. Library of Congress (2003) Politics of Oil, Libya, Country Studies.
- Vandewalle, (1998) Qadhafi's Libya 1969-1994. New York: ST. Martin's Press.
- Vandewalle, D. (1991) Qadhafi's 'perestroika: Economic and Political Liberalization in Libya, *Middle East Journal*, 45, 216-31.
- Velde, te D.W. (2001a) Policies towards Foreign Direct Investment in Developing Countries: Emerging Best-Practices and Outstanding Issues, paper presented at FDI conference. ODI.
- Velde, D. W. (2002) Foreign Direct Investment for Development. Policy challenges for Sub-Saharan African countries. Overseas Development Institute.
- Venkataramany, S. (2002) Determinants of Foreign Direct Investment in India: An Empirical Analysis of Source Countries and Target Industries. Ashland University, USA.
- Vernon, R. (1966) International Investment and International Trade in the Product Cycle. Quarterly. *Journal of Economics*, 80, 190-207.
- Wei, S. J. (2000) Local Corruption and Global Capital Flows, Brookings Papers on Economic Activity.
- Wei, S. I. (2000a) How Taxing is Corruption on International Investors?' *Review of Economics and Statistics*, 82: 1-11.

- Wells, L. And Allen, N. And El Ta (2001) Using Tax Incentives To Compete For Foreign Investment: Are They Worth The Costs? Occasional Paper No.15, FIAS.
- Wernerfelt, (1984) A Resource-Based View of the Firm, *Management Journal*, 5.
- Wershfani, A. S. (2003) Sustainable Development Through Petrodollar Investment in an Oil Rentier Economy: the Case of Libya. MCs thesis, University of Salford-UK.
- Wheeler, D. and. Mody, A. (1992) International investment location decisions: the case of US firms', *Journal of International Economics*, 33, 57-76.
- Wilkins, M. (1999) Two Literatures, Two Storylines: Is a General Paradigm of Foreign Portfolio and Foreign Direct Investment Feasible?', *Transational Corporations*, 8: 53-116.
- Williamson, O. (1975) *Markets and Hierarchies: Analysis and Antitrust Implications*. New York, NY: Free Press.
- Williamson, J. (2000) What should the World Bank think about the Washington Consensus, *The World Bank Research Observer*, 15 (2), 251-64.
- World Atlas, (2003). Map of Libya.
- World Bank (1991) *World Development Report 1991: The Challenge of Development* (New York: Oxford University Press).
- World Bank (1996) *Development Report* (World Bank Group: Washington).
- Wu, F. (1999) Intrametropolitan FDI firm location in Guangzhou, China: a Poisson and negative binomial analysis" *The Annals of Regional Science*, 33: 535-555.
- Zarmouh, O. O. (1998) *Optimal Investment in an Oil-Based Economy*. University of Bradford. PhD thesis.
- Zaramouh, O. O. (2003) Toward The Right Affective Investment Policies in the Libyan Economy, Paper presented in Conference on The Investment in the Libyan Economy. Benghazi: University of Garyounis, 8<sup>th</sup> –10<sup>th</sup>, July.
- Zhang. K. H. (2000) Why Is U.S. Direct Investment in China So Small?', *Contemporary Economic Policy*, 18: 82-94.

## **Appendices**

### **Appendix 1: Questionnaires to foreign oil companies in Libya.**

This questionnaire is designed for the foreign oil companies investing in Libya, to be completed by the managers and their representatives operating in Libya. Please be reassured that all information given in this questionnaire will be treated as strictly confidential, and will be used for scientific and academic purposes only.

Prepared by Mohamed Salem Ali, Ph.D. candidate in the Department of Economics  
Division, Newcastle Business School, Northumbria University, England UK.

## Letter to The Foreign Oil Companies in Libya.

The Manager

We are writing to invite you to participate in a confidential survey being undertaken by the Newcastle Business School, Northumbria University. The study is entitled (AN ECLECTIC APPROACH TO THE DETERMINANTS OF FOREIGN DIRECT INVESTMENT INFLOWS TO THE LIBYAN OIL AND GAS SECTOR). The main purpose of this survey is to investigate and analyse the economic factors determinants FDI inflows to the Libyan oil sector. A research questionnaire has been prepared to be completed a sample of subsidiaries of foreign oil companies in Libya.

We assure that the information supplied in this questionnaire will be kept in strict confidence and will not be used for any other purpose except for this academic research. We will be pleased to send you a summary of the research findings when the study is completed.

Your co-operation will greatly assist our research and is sincerely appreciated. We look forward to receiving your helpful answers.

Thank you very much for your co-operation and kind support.

Yours faithfully

**Dr. Majid Taghavi.**  
Senior Lecturer  
Newcastle Business School.  
Newcastle Business School.  
Northumbria University.  
Newcastle Upon Tyne  
NE1 8ST, England-UK  
Tel: 0191-2274282  
Fax: 0191-2274654  
Email: majid.taghavi@unn.ac.uk

Supervisor Signature:

**Mohamed Ali.**  
Ph.D. Researcher.  
Newcastle Business School.  
Northumbria University.  
Northumberland Building.  
Newcastle Upon Tyne.  
NE1 8ST. England-UK  
Tel: 0191-2273038  
Fax: 0191-2274684  
Email: Mohamed.ali@unn.ac.uk

Researcher Signature:

**Questionnaire for foreign oil companies investing in Libya.**

Reference No. ....

Date: [   /   /   ]

**Section I: Background Information.**

**1-Name of the company.** .....

**2-Location.** ..... **3-Nationality.** .....

**4-What is your position in your company?**

1-☐ Top-Manager. 2-☐ Vice-Manager. 3-☐ Middle-Manager. 4-☐ Chief-Executive.

**5-When did your firm start operation in Libya?** .....

**6-What is your area of investment (s)?**

1-☐ Crude oil. 2-☐ Natural gas. 3-☐ Both.

**7-What is the main activity (s) of your investment?**

1-☐ Exploration. 2-☐ Drilling. 3-☐ Production. 4-☐ Processing. 5-☐

Marketing.

6-☐ Consulting. 7-☐ Services. 8-☐ Developing. 9-☐ Co-operation.

10-☐ Others, (please specify) .....

**8-What was your method of investment?**

1-☐ Acquire existing company. 2-☐ Launch new company.

3-☐ Others, (please specify) .....

**9-A-Which of the following is the mode of your company investment in Libya?**

1-☐ Wholly-owned. 2-☐ Joint venture. 3-☐ Licensing. 4-☐ Contract.

5-☐ Others, (please specify) .....

**B-If joint venture**, 1-[ ..... %] Your company. 2-[..... %] National Oil Corporation.

*C-If contract, Nature period*

*D-If licensing, Nature period*

**10-Do you think that it is important to have local partner to operate successfully in Libya?**

1=☐ Not important. 2=☐ Important. 3=☐ Very important.

**Section II: Factors attracting your companies to invest in Libya.**

..

**1-To what extend Market size motivated your company to invest in Libya?**

1=☐ Not Important. 2=☐ Fairly Important. 3=☐ Important. 4=☐ Very Important. 5=☐ Most Important.

**2-Availability of raw materials (oil & gas)**

1=☐ Not Important. 2=☐ Fairly Important. 3=☐ Important. 4=☐ Very Important. 5=☐ Most Important.

**3-Quality of material**

1=☐ Not Important. 2=☐ Fairly Important. 3=☐ Important. 4=☐ Very Important. 5=☐ Most Important.

**4-Employment creation via labour surplus**

1=☐ Not Important. 2=☐ Fairly Important. 3=☐ Important. 4=☐ Very Important. 5=☐ Most Important.

**5-Low labour costs**

1=☐ Not Important. 2=☐ Fairly Important. 3=☐ Important. 4=☐ Very Important. 5=☐ Most Important.

**6-Wages subsidiaries (Exemption from taxes)**

1=☐ Not Important. 2=☐ Fairly Important. 3=☐ Important. 4=☐ Very Important. 5=☐ Most Important.

**7-Lack of expertise labour**

1=☐ Not Important. 2=☐ Fairly Important. 3=☐ Important. 4=☐ Very Important. 5=☐ Most Important.

**8-Low production costs**

1=☐ Not Important. 2=☐ Fairly Important. 3=☐ Important. 4=☐ Very Important. 5=☐ Most Important.

**9-Training subsidiaries (grants)**

1=☐ Not Important. 2=☐ Fairly Important. 3=☐ Important. 4=☐ Very Important. 5=☐ Most Important.

**10-Unexplored (under-research) country**

1=☐ Not Important. 2=☐ Fairly Important. 3=☐ Important. 4=☐ Very Important. 5=☐ Most Important.

**11-Gain economies of scale**

1=☐ Not Important. 2=☐ Fairly Important. 3=☐ Important. 4=☐ Very Important. 5=☐ Most Important.

**12-Lack or lower level of competition**

1=☐ Not Important. 2=☐ Fairly Important. 3=☐ Important. 4=☐ Very Important. 5=☐ Most Important.

**13-Enhance economic growth**

1=☐ Not Important. 2=☐ Fairly Important. 3=☐ Important. 4=☐ Very Important. 5=☐ Most Important.

**14-Geographical proximity**

1=☐ Not Important. 2=☐ Fairly Important. 3=☐ Important. 4=☐ Very Important. 5=☐ Most Important.

**15-Attractive of local investment policy**

1=☐ Not Important. 2=☐ Fairly Important. 3=☐ Important. 4=☐ Very Important. 5=☐ Most Important.

**16-Transfer of new technology and skills**

1=☐ Not Important. 2=☐ Fairly Important. 3=☐ Important. 4=☐ Very Important. 5=☐ Most Important.

**17-Product diversification**

1=☐ Not Important. 2=☐ Fairly Important. 3=☐ Important. 4=☐ Very Important. 5=☐ Most Important.

**Section III: Concerns and Suggestions.**

18-From your own past experiences, what are the main difficulties or concerns facing foreign investors in the Libyan oil sector?

1-☐ Technical. 2-☐ Employment. 3-☐ Managerial. 4-☐ Financial. 5-☐ Marketing.

6-☐ Government Regulation. 7-☐ Government Investment Law. 8-☐ Environmental.

19-Do you have any suggestions for promoting foreign investment in the Libyan oil sector?

1 .....



## Appendices

---

2.....

3.....

20-Do you have any further comments you would like to make, please do so?

1.....

2.....

3.....

21-Do you see foreign investment environment of Libya as promising in the foreseeable future?

1-Ö Yes. 2-Ö No.

Thank you very much for your time and kind co-operation.

If you want a COPY of the research result, please tick here Ö.

## Appendix 2: Copy of the Interviews Questions.

Interview questions to Libyan officials engaged with the foreign investment policies in the Libyan Ministries, Institutions and companies.

- 9 The current Libyan government adopting new foreign policy system to encourage FDI inflows to the Libyan economy and to find out another source of national income rather than oil sector. How do you see the foreign investment policy going in Libya (weakness & Strength) in respect of attractive FDI credit?
- 10 Is this write time to attract more FDI credit, if yes why?
- 11 What are the mean steps have been introduced by the government to attract more FDI inflows?
- 12 What are the roles of Libyan Investment Board in terms of attract more FDI inflows?
- 13 What are the roles of Central Bank of Libyan in terms of attract more FDI inflows?
- 14 Has the foreign policy programme including all sectors in the Libyan economy?
- 15 What is the most Libyan sector should encourage more foreign investors?
- 16 From your own past observation, are the levels of FDI inflows to the Libyan economy satisfy, if not why?

- 17 From your point of view, what are the roles of FDI inflows in the Libyan economy?
- 18 Is the Libyan legislation system good enough to encourage foreign investors to invest in Libya?
- 19 To what extent Libya can protect the rights of the foreign investors?
- 20 From your past experience, what are the cooperation aspects and to what extent Libya can benefit from foreign oil companies?
- 21 What do you think the main factors determinants FDI inflows to Libya in general and to the oil sector in particular?
- 22 Has Libya got any relative advantages to attractive FDI inflows?
- 23 Do you believe that the Libyan government should introduce more laws and policies in order to attract more FDI inflows to the Libyan sector.
- 24 From your opinion, what are the main obstacles and barriers facing foreign investors to invest in Libya?
- 25 Is there any change since the lifting of sanctions in case of entering foreign oil companies to the sector?
- 26 Have the recent Libyan foreign policies aim to establishment of partnership between Libyan and foreign companies or investors?
- 27 As we know oil sector represent the biggest sector in terms sharing of the national GDP, can we know the role of foreign oil companies in the oil sector?
- 28 What is happening now a part of the improvement of the Libyan business environment?

- 29 From your point of view, why the government in the past not interested in toward foreign policy and encourage FDI inflows, while nowadays there are indicators of more focus on it?
- 30 What are the mean difficulties facing the government to implemented FDI policy?
- 31 Regarding your experience, and after the lifting of USA and UN sanctions and new government open economic policy what is the future of FDI inflows to the Libyan oil sector?
- 32 Regarding your familiarity with the subject area, what are your suggestions and comments about the Libyan foreign policy system?

**List of Libyan interviewees.**

- 1- The Chairman of the Libyan Investment Board.
- 2- The manager of the Foreign Libyan Arab Bank.
- 3- The Secretary of People's Committee, Tripoli.
- 4- The deputy Manager of centre of central bank of Libya.
- 5- The Secretary of Ministry of Finance.
- 6- The manager of National Oil Cooperation.
- 7- The director of Chamber of Commerce, Tripoli.
- 8- The manager of Central Bank of Libya, Tripoli branch.
- 9- The manager of commercial relationships, development bank.
- 10- The head of Al-Fatah University.
- 11- The head of Economics Department at Al-Fatah University.
- 12- The head of Economics Department at Sebha University.
- 13- The head of the Oil Research Centre, NOC
- 14- The deputy Secretary of Ministry of planning and Development.
- 15- The deputy Secretary of Ministry of Energy.
- 16- The Chairman of the Foreign Relations Department at the Ministry of Economy.
- 17- The Chairman of the of the African Investment Union in Libya.
- 18- The Chairman of Umm Al-Jawaby Oil Service Company, based in London-UK.
- 19- The Chairman of Ras Lanuf National Oil and Gas Processing Company.
- 20- The Chairman of Teknika Oil Company, based in London-UK.

### Appendix 3: Investment Law No.5

**LAW NO. 5**  
**FOR THE YEAR 1997.**  
**CONCERNING ENCOURAGEMENT  
OF FOREIGN CAPITALS INVESTMENT**

**Article(1)**

The aim of this law is to attract investment of foreign capital in investment projects within the framework of the general policy of the State and of the objectives of economical and social development and in particular:

- Transfer of modern technology.
- Training the Libyan technical personnel.
- Diversification of income resources.
- Contribution to the development of the national products so as to help in their entry into the international markets .
- Realization of a locale development.

**Article(2)**

This law shall apply to the investment of the foreign capital held by Libyans and the nationals of Arab and Foreign States in investment projects.

**Article(3)**

In the application of this law, unless the context otherwise requires, the following words and phrases shall have the meanings assigned opposite each:

1. Jamahyria means The Great Socialist People's Libyan Arab Jamahyria.
2. The law means The law of Foreign Capitals Investment Encouragement.
3. The Secretary means The Secretary of the General People's Committee for Planning, Economy and Commerce.
4. Authority means Libyan Foreign Investment Board.
5. The Executive Regulation means The Regulation issued for the implementation of the provisions of this law.
6. The Foreign Capital means The total financial value brought into the Great Jamahyria whether owned by Libyans or foreigners in order to undertake an investment activity.

7. Project means Any economic enterprise established in accordance with this law the result of its work is the production of goods for end or intermediate consumption, or investment goods, or the export or provision of service, or any other enterprise approved as such by the General People's Committee.

8. Investor means Any natural or juridical entity national or non-national, investing in accordance with the provisions of this law.

#### **Article(4)**

This law regulates the investment of foreign capital brought into the Jamahyria in any of the following forms:

- Convertible foreign currencies or substitutes thereof brought through official banking methods.
- Machinery, equipment, tools, spare parts and the raw materials needed for the investment project.
- Transport means that are not locally available.
- Intangible rights; such as patents, licenses, trade marks and commercial names needed for the investment project or operation thereof.
- Reinvested part of the profits and returns of the project.

The Executive Regulation shall regulate the manner for the evaluation of the in kind portions used in the formation of the capital designated for investment in LIBYA.

#### **Article(5)**

There shall be established an Authority to be known as "Libyan Foreign Investment Board " having its own independent juridical personality, under the jurisdiction of the General People's committee for Planning, Economy and Commerce . The Authority shall be established by a decision from the General People's Committee upon a proposition by the Secretary stating the Authority's legal domicile, its secretary and members of its management committee.

The Executive Regulation shall regulate the meetings of the Authority and the administrative procedures required for establishing the project.

#### **Article(6)**

The Authority shall work for the encouragement of foreign capitals investment and promotion for the investment projects by various means; in particular it shall:

1. study and propose plans to organize foreign investment and supervise foreign investments in the country .

2. receive the applications for foreign capital investments to determine whether they satisfy the legal requirements , and the feasibility study for the project and then submit its recommendations to the Secretary accordingly .
3. gather and publish information and conduct economic studies relevant to the potentials of investments in the projects that contribute to the economic development of the country .
4. take proper actions to attract foreign capitals and promote the chances of investment through various means .
5. recommend exemptions, facilities or other benefits for the projects that are considered important for the development of the national economy, or recommend the renewal of the exemptions and benefits as provided for in the law for further periods of time . It shall submit its recommendations to the relevant authority.
6. consider without prejudice to the right of the investor to petition and litigate complains, petitions or disputes lodged by the investors resulting from the application of this law .
7. study and review periodically the investment legislations, propose improvement thereof and submit same to the concerned authority .
8. perform any other functions assigned to it by the General People's Committee .

#### **Article (7)**

The project is required to realize all or some of the following:

- production of goods for export or contribution to the increase of export of such goods or substitute imports of goods in total or in part .
- make available positions of employment for Libyan manpower, train and enable some to gain technical experience and know-how. The Executive Regulation shall set the conditions and terms of employment of Libyan manpower.
- use of modern technology or a trade mark or technical expertise .
- provision of a service needed by the national economy or contribute to the enhancement or development of such service.
- strengthen the bonds and integration of the existing economic activities and projects or reduce the cost of production or contribute in making available materials and supplies for their operations .
- make use or help in making use of local raw materials .
- contribute to the growth and development of the remote or underdeveloped areas .

**Article(8)**

Investment is permissible in the following areas:

- Industry
- Health
- Tourism
- Services
- Agriculture

and any other area determined by a decision from the General People's Committee according to a proposal from the Secretary .

**Article(9)**

The permit for foreign capital investments shall be granted by the Authority after the issuance of the Secretary's decision approving the investment.

**Article(10)**

Projects established within the framework of this law shall enjoy the following benefits:

A) An exemption for machinery, tools and equipment required for execution of the project, from all custom duties and taxes, and taxes of the same impact.

B) An exemption for equipment, spare parts and primary materials required for the operation of the project, from all custom duties and custom taxes imposed on imports as well as other taxes of the same impact for a period of five years.

C) Exemption of the project from the income taxes on its activities for a period of five years as from the date of commencement of production or of work, depending on the nature of the project. This period shall be extendable by an additional duration of three years by a decision from the General People's Committee upon a request of the same by the secretary. Profits of the project will enjoy these exemptions if reinvested. The investor shall be entitled to carry the losses of his project within the years of exemption to the subsequent years.

D) Goods directed for export shall be exempted from excise taxes and from the fees and taxes imposed on exports when they are exported.

E) The project shall be exempted from the stamp duty tax imposed on commercial documents and bills used.

Exemptions mentioned in paras A, B, and D of this Article do not include the fees imposed in consideration of services such as harbour, storage and handling dues.

**Article(11)**



Equipment, machinery, facilities, spare parts and primary material imported for the purpose of the project may neither be disposed of through sale or abandoned without the approval of the Authority and after payment of custom duties and taxes imposed on importation thereof; nor be used for purposes other than those licensed therefore .

#### **Article(12)**

The investor shall have the right to:

A) Re-export invested capital in the following cases:

- end of the project's period .
- liquidation of the project .
- sale of the project in whole or in part .
- elapse of a period of not less than five years as of the issuance of the investment permits .

B) Re-transfer the foreign capital abroad in same form in which it was first brought in after the elapse of a period of six months as of its importation in cases where difficulties or circumstances out of the investor's control prevent its investment.

C) It is permissible to transfer annually the net of the distributed profits realized by the project and interest thereof.

D) The investor has the right to employ foreigners whenever the national substitute is not available.

- The foreign employees who come from abroad have the right to transfer abroad a percentage of their salaries and wages and any other benefits or rewards given to them within the framework of the project.

- Conditions and terms regarding the implementation of this Article shall be set by the Executive Regulation.

#### **Article(13)**

The project shall not be subject to registration at the commercial register nor at the register of the Importers and Exporters; the Executive Regulation will set the procedures of the registrations at the Authority.

#### **Article (14)**

A project established in the local development areas or a project which contributes to food security or a project which uses installation and means conducive to save energy or water or contributes to the protection of environment, will enjoy the exemption mentioned in paras. B) and C) of Article 10 of this Law for an additional period by a decision from the General People's Committee upon a proposal from the Secretary . The

Executive Regulation will set the terms and conditions according to which the project could be considered as achieving these goals.

**Article (15)**

Not with standing ownership laws in force, the investor shall be entitled to hold title for land use. The investor may also lease such land, construct buildings thereon and be entitled to own any property or lease thereof required for establishment or operation of the project; all as per the terms and conditions set in the Executive Regulation.

**Article (16)**

The investor shall have the right to open for his project an account in convertible currencies at a commercial bank or at the Libyan Arab Foreign Bank.

**Article (17)**

Ownership of the project may be transferred in whole or in part to another investor with the approval of the Authority; the new owner will replace its predecessor in all rights, undertakings and obligations arising there from in accordance with the provisions of this law and other legislations in force. The Executive Regulation shall set the terms and conditions for the transfer of ownership.

**Article (18)**

In case it is proven that the investor has violated any provisions of this law or the executive regulation; the authority shall issue a warning to the investor to rectify the violations within a period of time specified therein. In case of failure by the investor to adhere thereto, the secretary, upon a recommendation by the Authority, may:

- deprive the project from some of the benefits provided for in this law.
- oblige the investor to pay double the exemptions granted to him .

**Article (19)**

The permit of the project may be withdrawn or the project finally liquidated in the following cases:

- failure to start or complete the project in accordance with the terms and conditions set by the Executive Regulation;
- violation of the general provisions of this law and Executive Regulation;
- repetition of violations .

All in accordance with the procedures specified by the Executive Regulation.

**Article (20)**

The investor shall be entitled to petition in writing against any decision affecting him as per article 18 or article 19 of this law, or against any disputes arising because of the implementation of the provisions of this law within thirty days as of the date of notifying him by a delivery guaranteed letter; the Executive Regulation shall specify the proper authority to which petitions should be submitted and processes of petition.

**Article (21)**

The investor should;

-Maintain regular books and records for the project.

-Prepare an annual budget and profit and loss account audited by a chartered accountant as per the conditions set forth in the Commercial Law.

**Article (22)**

The employees of the Authority designated by a decision from the secretary shall have the power of the judicial officers to control the enforcement of this law and to unveil and record the violations and refer same to the competent authority ; for this purpose the said employees shall be entitled to inspect the projects and check the books and records relevant to their activities.

**Article (23)**

The project may not be nationalized, dispossessed seized, expropriated, received, reserved, frozen, or subjected to actions of the same impact except by force of law or court decision and against an immediate and just compensation provided that such actions are taken indiscriminately; the compensation will be calculated on the basis of the fair market value of the project in the time of action taken. The value of the compensation in convertible currencies may be transferred within a period not exceeding one year and according to the rate of exchange prevailing at the time of transfer .

**Article (24)**

Any dispute arising between the foreign investor and the state, due to the investor's act or to actions taken by the state, shall be referred to a court having jurisdiction in the Jamahyria except where there is a bilateral agreement between the Jamahyria and the state to which the investor belongs or where a multi – lateral agreements to which the Jamahyria and the state to which the investor belongs are parties that provide for relevant reconciliation or arbitration, or there is a special agreement between the investor and the state containing provisions in regard to an arbitration clause.

**Article (25)**

Foreign investments in existence on the date of issuance of this Law shall enjoy the privileges and exemptions provided for herein.

**Article (26)**

Provisions of this law shall not apply to foreign capital invested or to be invested in petroleum projects as per the provisions of law number 25 of 1955, as amended.

**Article (27)**

The executive regulation to this law will be issued by a decision from the General People's Committee upon a proposal from the Secretary.

**Article (28)**

Law number 37 of 1968 regarding investment of foreign capitals in Libya is hereby repealed and so are any other provisions that may contradict the provisions of this law.

**Article (29)**

This law shall be published in the Official Gazette and in the different media and be effective as of its publication in the Official Gazette.

## Appendix 4: Investment Law No.7

### **Law No. (7)** **for the year 2003.**

**By modifying some of the provisions of the law No.( 5 ) year 1997 in relation of  
encouraging foreign Capital Investment.**

The General Peoples Congress

In execution of the Basic Peoples Congresses decisions in its annual session for the year 2003, and after reviewing the declaration of establishing peoples authority , and the Great Green Document for human rights in the Era of the masses , and the Law No. (20) year 1991 regarding promotion of freedom , and the Law No. ( 1) year 2002 concerning peoples committees and basic conferences , and income tax Law No. (64) year 1973 and its amendments , and the Customs Law No. (67) year 1973 and its amendments and the Law No. (1) year 1993 regarding Banks , currencies , credits and its amendments , and the Law No. (5) for the year 1997 regarding encouragement of foreign investment capitals.

The following law has been formulated :-

#### **Article (1)**

To modify the following articles ( the second , third and thirteen of the Law No. (5) concerning encouragement of foreign investment capitals , to be as follow :-

#### **Article (2)**

This Law shall prevails on the investment foreign capitals owned by Libyan Arab Citizens and citizen's of Arab and foreign countries in investment projects , its allowed for national capital to make partnership with the foreign capita in the investment , the executive bill of this law shall specify the basis and rules when participating with local capital.

#### **Article (3)**

In implying this Law , its meant by the following terminology's and phrases , text & meaning , unless indicates other than that meaning :-

- 1-Great Jamahiriya : The Great Socialist Peoples Libyan Arab Jamahiriya
- 2-The Law: Law for encouragement of foreign investment capitals.
- 3-Secretary: Secretary of the General Peoples Committee for Trade and Economy.
- 4-The Authority: Investment Encouraging Authority.
- 5- Extensive resolution: is the resolution which is issued in execution of provisions of this Law.
- 6- Foreign Capital (total financial volume which enters to Great Jamahiriya) whether its owned by Libyan or foreigners in using it in the investment activity.
- 7- National Capital (cash or in kind of volume, evaluated in local currency which forms the capital of investment project owned by Libyan citizens or Libyan body that corporate its whole capital is owned by Libyan citizens.
- 8- Investment project : any economic establishment incorporated according to the law , and shall produce commodities for final and medium consumption or investment commodities or for the purpose of export , or provision of services or any other establishment approved by the secretariat of the general peoples committee .

9- The investor: Each natural person or body corporate, national or foreigner who invests according to provisions of this law.

**Article Thirteen**

The investment project shall not be abide by legal forms provided for in the legislative in force, and shall not be subject to procedures of registration in industrial register as well as registers of importers and exporters.

The executive regulation shall specify legal forms for investment projects which are permissible to be incorporated according to provisions of this law, values of incorporation and procedures of registration in investment register prepared for this purpose.

The investment project shall enjoy by independent body corporate and financial guarantee as soon as its registration in the fore said register.

**Article No. (2)**

This law shall be in force from date of its issue, and to be promulgated in record of General People's Congress Legislation.

Law No. (8) for the year 1971, regarding amendment of some provisions of Law No. (28) for the 1971 in respect of compulsory insurance for civil responsibility resulted from accidents of vehicles:

In execution to decisions of basic People's Congresses in its annual general session for the year 1370.

After seeing declaration of accomplishment of People's Power.

And on the green magna charta for human right in the era the masses and on Law No. (20) for the year 1991 regarding confirmation of the freedom and on Law No. (1) for the 1369 in respect of Popular Congresses and People's Committees.

And on Law No. (11) for the 1984 in relation to traffic on public roads and its amendments.

And on Law No. (28) for the year 1971 regarding compulsory insurance for civil responsibility resulted from accidents of vehicles.

The following has been dratted: -

Text of Article No. (6) of the above mentioned Law No. (28) for the year 1971 to be amended as following:-

**Article 6**

The insurer is obliged to cover civil liabilities resulted from death, or civil harms occurring to any one due to car accidents in Great Jamahiriya, with an amount specified by the General Peoples committee, taking into consideration that the specified amount of compensation shall be given to the concerned amicably, within the maximum limit defined for compensation whether material or moral, incase of severe trauma for mother , father , and children other than in the case of death , it will be distributed between them , according to the rules defined by court in relation to the inflicted damage .This article will be in-forced , otherwise a final Law maybe issued later on in this regard .

**SecondArticle:-**

Any provisions that contradict this law shall be abolished.

Third Article :- This Law shall be in force from date of its issue , and to be promulgated in the records of the General Peoples Congress.

Appendix 5: Official Letter from the Libyan People's Bureau (London) to Central Bank of Libya (Tripoli) and the National Authority for Information and Documentations.

السلطة العامة للمعلومات والتوثيق  
السلطة العامة للمعلومات والتوثيق  
السلطة العامة للمعلومات والتوثيق

التاريخ:  
الرقم الإشاري:

السلطة العامة للمعلومات والتوثيق  
السلطة العامة للمعلومات والتوثيق  
السلطة العامة للمعلومات والتوثيق

الأخوة / مصرف ليبيا المركزي  
الأخوة الهيئة العامة للتوثيق والمعلومات

بعد التحية ،،،

يفيدكم المكتب الشعبي الليبي - لندن بأن الطالب / محمد سالم علي موسى ، الموفد من  
التعليم بقرار رقم 824 لسنة 1369 ور ، لتحضير درجة الدكتوراه في مجال الاقتصاد  
الزراعي ، حيث بدأ الصرف على المعني بتاريخ 2002/5/8م ، وتنتهي مدته القانونية  
بتاريخ 2005/9/8م .

اعطى له هذا التعريف لغرض اتمام الدراسة الحقلية في أرض الوطن

والسلام عليهم ورحمة الله وبركاته

حامد مسعود محمد  
الممثل الثقافي  
المستقيم الشعبي الليبي - لندن

السلطة العامة للمعلومات والتوثيق  
السلطة العامة للمعلومات والتوثيق  
السلطة العامة للمعلومات والتوثيق

ملاحظات:  
1- أي كسب أو تغير يلحق التعريف.  
2- يعتبر هذا التعريف قانوني بعد الختم والتوقيع من المكتب.  
صورة إلى :  
- الملف الشخصي - 3764  
- الملف الشوري العام.

9th, 10th Floor, Chelsea, London SW3 3NP Tel: 020 7351 7033/7351 5565/7352 5013 Fax: 020 7352 7064

Appendix 6: Official Letter from the Libyan People's Bureau (London) to the NOC (Tripoli) for participation in the survey.

إدارة الشؤون الثقافية - ليبيا  
 تاريخ: 23 / 4 / 2003  
 الرقم الانمائي: 55 - 4

الرجاء / الأخت / المؤسسة الوطنية للنفط

بعد التحية ،،،

يفيدكم المكتب الشعبي الليبي - لندن بأن الطالب / محمد سالم علي موسى ، الموفد من التعليم بقرار رقم 824 لسنة 1369 ور ، لتحضير درجة الدكتوراه في مجال الاقتصاد الزراعي ، حيث بدأ الصرف على المعنى بتاريخ 2002/5/8م وتنتهي مدته القانونية بتاريخ 2005/9/8م .

اعطى له هذا التعريف لغرض اتمام الدراسة الحقلية في أرض الوطن .

والسلام عليكم ورحمة الله وبركاته

خاتمة معهود معبد  
 الملقب الثقافي  
 المكتب الشعبي الليبي - لندن

ملاحظات:  
 1- أي نشاط أو تغير يخطر التعريف.  
 2- يشتر هذا التعريف قانوني بعد الختم والتوقيع من المكتب.  
 صورة من:  
 الملف الشخصي - 3764  
 الملف الدوري العام.

61-52 Embassier Gardens London SW7 1NA Tel: 020 7594 6152 Fax: 020 7594 6274 Email: London@libya.gov.ly



Appendix 7: Official Letter from the NOC to the Foreign Oil Companies for participation in the survey.

الجمهورية العربية الليبية  
الشعبية الاشتراكية العظمى  
المؤسسة الوطنية للنفط

التاريخ: ١٩٧١ / ٥ / ١٩٧١  
الموافق: / /

التسجيل: ٤٠٨٠  
الملف: ٤٠٨٠

الأخ / مدير عام شركة .....

بعد التحية ...

يساء على الطلب الموجه من الأخ / محمد سالم علي طالب دكتوراه في علم الاقتصاد بالساحة البريطانية وذلك بتاريخ 2003/5/6 ف وحيث أن عنوان الرسالة دراسة تأثير استثمارات الشركات الأجنبية النفطية في عمليات قطاع النفط والغاز بالجمهورية العظمى والمرفق باستبيان لتجميع المعلومات في إعداد هذه الدراسة .

ويساء على توجيهات الأخ الأمين بتاريخ 2003/5/6 ف بتوجيه الطالب والمساعدة في استكمال دراسته لذلك نأمل العمل على استيفاء الاستبيان المرفق بالتنسيق مع المعنى وموافاته به .

والسلام عليكم ورحمة الله وبركاته ...





صالح المبروك بن رحومة  
مدير عام تنمية وتطوير القوى العاملة

مدير عام تنمية وتطوير القوى العاملة

صورة للأخ / أمين اللجنة الشعبية

ميدان غازة النفوس - ص.ب. : 2652 / 5235 طرابلس - هاتف : 90 / 4446181 - برقية مصرف : 3331930 / فاكس : 20270 - 20271 - العنوان البرقي ليبيا

Appendix 9: Official letter from the Libyan Ministry of Higher Education introducing and rants me and my subject to the all participators, which they might help.

اللجان في كل مكان		لايمقراتية بموت مؤتمرات شعبية
الجمهورية العربية الليبية الشعبية الاشتراكية العظمى اللجنة الشعبية العامة المركز الوطني لتنظيم التعليم		
التاريخ: 13 / 1 / 2004 الموافق: 10 / 03 / 2004	الرقم الاشاري: 5976/س	
		
الى من يهمه الامر		
بعد التحية،،،،،		
<b>يفيدكم</b> قسم الدراسات العليا باللجنة الشعبية العامة (المركز الوطني لتنظيم التعليم) بأن الأخ/ محمد سالم على موسى، احد الطلبة الدارسين على حساب الجمع بالساحة البريطانية بموجب قرار رقم (824)) لسنة 1369 ق.م.		
أعطيت له هذه الإفادة بناء على طلبه .		
والسلام عليكم ورحمة الله وبركاته		
 د. ميلاد عبدالله الطاهر رئيس قسم الدراسات العليا		
		
الملف الشخصي: الدوري العام عبدالحنيف ع. نجاة		
شارع سيدي - زاوية الدمامي هاتف: 3402445 - 3402446 - 3401650 - بريد بصور: 3401646 / ص.ب (397)		

## Appendix 10: Letter to The Libyan Prime-Minister.

Dear Dr. Shukri Ghanem

The Libyan Prime-Minister

Date: 30 April 2003.

First of all I would like to express my great honour for writing to you. In fact, every article and study I have read highlights your government's success in the economic reform.

My name is Mohamed Salem Ali Moussa. I am PhD student at Newcastle Business School, Northumbria University, England UK. I have granted a scholarship from the Libyan government to study PhD in the UK, my reference number in the Libyan Embassy (London) is 02/3764. My study is entitled (**AN ECLECTIC APPROACH TO THE DETERMINANTS OF FOREIGN DIRECT INVESTMENT INFLOWS TO THE LIBYAN OIL AND GAS SECTOR**). The main purpose of this study is to investigate and analyse the economic factors determinants FDI inflows to the Libyan oil sector. A research questionnaire has been prepared to be completed a sample of subsidiaries of foreign oil companies in Libya.

We assure that the information supplied in this questionnaire will be kept in strict confidence and will not be used for any other purpose except for this academic research. We will be pleased to send you a summary of the research findings when the study is completed.

My hope is to get a letter signed by you or your office in Arabic and English.

There is no doubt that this letter will encourage companies to be more cooperative towards achieving this work.

Please accept my deep appreciation.

With many thanks and regards

Yours truly,  
Mohamed S. A. Moussa.  
Newcastle Business School  
University of Northumbria  
Northumberland Building.  
Newcastle Upon Tyne.  
NE1 8ST. England-UK  
Tel: +44-191-2273942  
Fax: +44-191-2274608  
Email: [mohamedsalem\\_ali@hotmail.com](mailto:mohamedsalem_ali@hotmail.com)

Appendix 11: Letter to The Libyan Ministry of Economy and Trade.

**Dear Dr. Abdelgader Omer Belkhair,**  
**The Libyan Ministry of Economy and Trade**

Date: 30 April 2003.

I am very pleased to write to you. My name is Mohamed Salem Ali Moussa. I am PhD student at Newcastle Business School, Northumbria University, England UK. I have granted a scholarship from the Libyan government to study PhD in the UK, my reference number in the Libyan Embassy (London) is 02/3764. My study is entitled (**AN ECLECTIC APPROACH TO THE DETERMINANTS OF FOREIGN DIRECT INVESTMENT INFLOWS TO THE LIBYAN OIL AND GAS SECTOR**). The main purpose of this study is to investigate and analyse the economic factors determinants FDI inflows to the Libyan oil sector. A research questionnaire has been prepared to be completed a sample of subsidiaries of foreign oil companies in Libya.

We assure that the information supplied in this questionnaire will be kept in strict confidence and will not be used for any other purpose except for this academic research. We will be pleased to send you a summary of the research findings when the study is completed.

I need your help by sending me a list of the foreign oil companies investing in Libya (Names, Addresses and Investment activities).

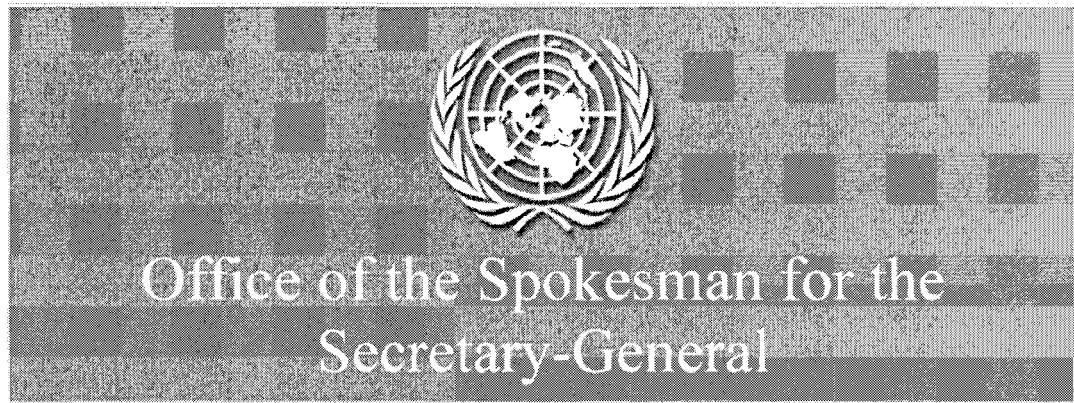
There is no doubt that will help me and save my time and energy in purpose of towards achieving this work.

Please accept my deep appreciation.

With many thanks and regards

Yours truly,  
Mohamed S. A. Moussa.  
Newcastle Business School  
University of Northumbria  
Northumberland Building.  
Newcastle Upon Tyne.  
NE1 8ST. England-UK  
Tel: +44-191-2273942  
Fax: +44-191-2274608  
Email: mohamedsalem\_ali@hotmail.com

## Appendix 12: Sanctions against Libya.



### USE OF SANCTIONS UNDER CHAPTER VII OF THE UN CHARTER

(Updated September 2003)

#### Libya

**Resolution 748 (1992)** of 31 March 1992 imposed an arms and air embargo and a reduction of Libyan diplomatic personnel serving abroad. It also set up a Security Council sanctions committee.

**Resolution 883 (1993)** of 11 November 1993 tightened sanctions on Libya. In this resolution, the Security Council, among other items, approved the freezing of Libyan funds and financial resources in other countries and banned the provision to Libya of equipment for oil refining and transportation.

**Resolution 1192 (1998)** of 27 August 1998 reaffirmed that the measures set forth in its **Resolutions 748** and **883** remain in effect and binding on all Member States, and in this context reaffirmed the provisions of paragraph 16 of **Resolution 883**, and decided that the aforementioned measures shall be suspended immediately if the Secretary-General reports to the Council that the two accused have arrived in the Netherlands for the purpose of trial before the court described in paragraph 2 of the resolution or have appeared for trial before an appropriate court in the United Kingdom or the United States, and that the Libyan Government has satisfied the French judicial authorities with regard to the bombing of UTA 772.

**Resolution 1192** also expressed its intention to consider additional measures if the two accused have not arrived or appeared for trial promptly in accordance with paragraph 8 of the resolution.

The Security Council, at its 3992<sup>nd</sup> Meeting held on 8 April 1999, adopted a Presidential Statement (**S/PRST/1999/10**), in which it noted that the conditions for suspending the wide range of aerial, arms and diplomatic measures against the Libyan Arab Jamahiriya had been fulfilled as of 5 April, 1400 hours EST. It therefore suspended sanctions indefinitely against Libya.

In Resolution 1506 (2003), adopted on 12 September 2003, the Security Council formally lifted the sanctions against Libya and terminated the mandate of the Sanctions Committee for Libya. The resolution was adopted by 13 votes in favour and none against, with the United States and France abstaining.

## Appendix 13: Some Results Obtained From the Questionnaire.

### Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
MOT1	35	1	5	3.34	1.305	1.703
MOT2	35	1	5	4.40	.976	.953
MOT3	35	1	5	3.51	1.422	2.022
MOT4	35	1	5	2.40	1.193	1.424
MOT5	35	1	5	2.51	1.269	1.610
MOT6	35	1	5	2.63	1.165	1.358
MOT7	35	1	5	2.40	1.241	1.541
MOT8	35	1	5	3.20	1.256	1.576
MOT9	35	1	5	2.37	1.114	1.240
MOT10	35	1	5	3.77	1.087	1.182
MOT11	35	1	5	2.89	1.078	1.163
MOT12	35	1	5	2.80	1.023	1.047
MOT13	35	1	5	3.20	1.279	1.635
MOT14	35	1	5	3.74	1.146	1.314
MOT15	35	1	4	2.00	.767	.588
MOT16	35	1	5	3.11	1.157	1.339
MOT17	35	1	5	2.60	1.288	1.659
Valid N (listwise)	35					

### Frequency Table

#### MOT1

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid NOT IMPORTANT	5	14.3	14.3	14.3
FAIRLY IMPORTANT	3	8.6	8.6	22.9
IMPORTANT	9	25.7	25.7	48.6
VERY IMPORTANT	11	31.4	31.4	80.0
MOST IMPORTANT	7	20.0	20.0	100.0
Total	35	100.0	100.0	

**MOT2**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NOT IMPORTANT	1	2.9	2.9	2.9
	FAIRLY IMPORTANT	1	2.9	2.9	5.7
	IMPORTANT	3	8.6	8.6	14.3
	VERY IMPORTANT	8	22.9	22.9	37.1
	MOST IMPORTANT	22	62.9	62.9	100.0
	Total	35	100.0	100.0	

**MOT3**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NOT IMPORTANT	5	14.3	14.3	14.3
	FAIRLY IMPORTANT	5	14.3	14.3	28.6
	IMPORTANT	2	5.7	5.7	34.3
	VERY IMPORTANT	13	37.1	37.1	71.4
	MOST IMPORTANT	10	28.6	28.6	100.0
	Total	35	100.0	100.0	

**MOT4**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NOT IMPORTANT	8	22.9	22.9	22.9
	FAIRLY IMPORTANT	15	42.9	42.9	65.7
	IMPORTANT	4	11.4	11.4	77.1
	VERY IMPORTANT	6	17.1	17.1	94.3
	MOST IMPORTANT	2	5.7	5.7	100.0
	Total	35	100.0	100.0	



**MOT5**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NOT IMPORTANT	8	22.9	22.9	22.9
	FAIRLY IMPORTANT	12	34.3	34.3	57.1
	IMPORTANT	8	22.9	22.9	80.0
	VERY IMPORTANT	3	8.6	8.6	88.6
	MOST IMPORTANT	4	11.4	11.4	100.0
	Total	35	100.0	100.0	

**MOT6**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NOT IMPORTANT	7	20.0	20.0	20.0
	FAIRLY IMPORTANT	10	28.6	28.6	48.6
	IMPORTANT	8	22.9	22.9	71.4
	VERY IMPORTANT	9	25.7	25.7	97.1
	MOST IMPORTANT	1	2.9	2.9	100.0
	Total	35	100.0	100.0	

**MOT7**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NOT IMPORTANT	10	28.6	28.6	28.6
	FAIRLY IMPORTANT	10	28.6	28.6	57.1
	IMPORTANT	9	25.7	25.7	82.9
	VERY IMPORTANT	3	8.6	8.6	91.4
	MOST IMPORTANT	3	8.6	8.6	100.0
	Total	35	100.0	100.0	

**MOT8**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NOT IMPORTANT	3	8.6	8.6	8.6
	FAIRLY IMPORTANT	8	22.9	22.9	31.4
	IMPORTANT	10	28.6	28.6	60.0
	VERY IMPORTANT	7	20.0	20.0	80.0
	MOST IMPORTANT	7	20.0	20.0	100.0
	Total	35	100.0	100.0	

**MOT9**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NOT IMPORTANT	7	20.0	20.0	20.0
	FAIRLY IMPORTANT	17	48.6	48.6	68.6
	IMPORTANT	3	8.6	8.6	77.1
	VERY IMPORTANT	7	20.0	20.0	97.1
	MOST IMPORTANT	1	2.9	2.9	100.0
	Total	35	100.0	100.0	

**MOT10**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NOT IMPRTANT	1	2.9	2.9	2.9
	FAIRLY IMPORTANT	4	11.4	11.4	14.3
	IMPORTANT	7	20.0	20.0	34.3
	VERY IMPORTANT	13	37.1	37.1	71.4
	MOST IMPORTANT	10	28.6	28.6	100.0
	Total	35	100.0	100.0	

**MOT11**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NOT IMPORTANT	2	5.7	5.7	5.7
	FAIRLY IMPORTANT	12	34.3	34.3	40.0
	IMPORTANT	13	37.1	37.1	77.1
	VERY IMPORTANT	4	11.4	11.4	88.6
	MOST IMPORTANT	4	11.4	11.4	100.0
	Total	35	100.0	100.0	

**MOT12**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NOT IMPORTANT	3	8.6	8.6	8.6
	FAIRLY IMPORTANT	12	34.3	34.3	42.9
	IMPORTANT	10	28.6	28.6	71.4
	VERY IMPORTANT	9	25.7	25.7	97.1
	MOST IMPORTANT	1	2.9	2.9	100.0
	Total	35	100.0	100.0	

**MOT13**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NOT IMPORTANT	5	14.3	14.3	14.3
	FAIRLY IMPORTANT	5	14.3	14.3	28.6
	IMPORTANT	8	22.9	22.9	51.4
	VERY IMPORTANT	12	34.3	34.3	85.7
	MOST IMPORTANT	5	14.3	14.3	100.0
	Total	35	100.0	100.0	

**MOT14**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NOT IMPORTANT	3	8.6	8.6	8.6
	FAIRLY IMPORTANT	1	2.9	2.9	11.4
	IMPORTANT	7	20.0	20.0	31.4
	VERY IMPORTANT	15	42.9	42.9	74.3
	MOST IMPORTANT	9	25.7	25.7	100.0
	Total	35	100.0	100.0	

**MOT15**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NOT IMPORTANT	9	25.7	25.7	25.7
	FAIRLY IMPORTANT	18	51.4	51.4	77.1
	IMPORTANT	7	20.0	20.0	97.1
	VERY IMPORTANT	1	2.9	2.9	100.0
	Total	35	100.0	100.0	

**MOT16**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NOT IMPORTANT	2	5.7	5.7	5.7
	FAIRLY IMPORTANT	10	28.6	28.6	34.3
	IMPORTANT	10	28.6	28.6	62.9
	VERY IMPORTANT	8	22.9	22.9	85.7
	MOST IMPORTANT	5	14.3	14.3	100.0
	Total	35	100.0	100.0	

**MOT17**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NOT IMPORTANT	7	20.0	20.0	20.0
	FAIRLY IMPORTANT	13	37.1	37.1	57.1
	IMPORTANT	6	17.1	17.1	74.3
	VERY IMPORTANT	5	14.3	14.3	88.6
	MOST IMPORTANT	4	11.4	11.4	100.0
	Total	35	100.0	100.0	

Appendix 14: Application Form for foreign investors to invest in Libya.

الجمهورية العربية الليبية الشعبية الاشتراكية العظمى  
The Great Socialist People's Libyan Arab Jamahiriya

هيئة تشجيع الاستثمار

Libya Foreign Investment Board

طلب الموافقة على إقامة مشروع استثماري

Application form for the Agreement to execute an Investment Project

الأخ / أمين اللجنة الشعبية لهيئة تشجيع الاستثمار

To the Secretary of the People's Committee for Libyan Foreign Investment Board.

Dear Sir

بعد التحية ،،،

..... / Name of applicant: مقدم الطلب

..... / Position: ..... / Nationality: الجنسية / الصفة

..... / ID or passport no: ..... / Tel: الهاتف / رقم البطاقة أو جواز السفر

..... / Address: ..... / Fax: بريد مصور / العنوان

..... / E-mail : ..... / P. O. Box: صندوق بريد

نتقدم إليكم بطلب الموافقة على إقامة مشروع:

We hereby would like to apply for the project Approval:

.....

.....

للمؤسسين	Of the following founders:
Nationality الجنسية	Name الاسم

وفقاً للقانون رقم (5) لسنة 1997 ف و تعديلاته بشأن تشجيع استثمار رؤوس الأموال الأجنبية ولائحته التنفيذية.

In accordance to Law no. 5 of 1997 and his changed concerning encouragement of foreign capitals investment and its executive regulation.

التوقيع

Signature

.....

ملاحظة : يرفق بالطلب التفويض القانوني المعتمد بإتمام إجراءات المشروع.

Attachment:

Authorized attestation for the proxy HOLDER to Complete the Project Procedures.

Project's detail

بيانات عن المشروع

1. أسم المشروع : ..... project's name :

2. الشكل القانوني للمشروع : ..... Legal body of the project :

3. مجال الاستثمار : ..... Area of investment:

4. نوع النشاط : ..... Type of activity:

5. موقع المشروع : ..... project's location :

6. عنوان المقر الرئيسي للمشروع : ..... Head office of the project:

7. مدة لتنفيذ المشروع : ..... شهر month ..... Duration of the project

8. العمر المتوقع للمشروع : ..... سنة Year ..... Expected duration of project:

9. السوق المستهدف : ..... Targeted market:

المحلى %..... Local: % التصدير %..... Export:

10. مصادر المواد الخام المستخدمة : ..... Sources of raw material:

محلية %..... Local: % أجنبية %..... Foreign:

11. التقنية المستخدمة : ..... Applied technology:

. نوع الآلات والمعدات ( إن وجدت ) ، (يرفق بيان تفصيلي )

.....  
.....  
.....

a. Type of machinery and equipment (if available, please attach detailed statement)

.....  
.....  
.....

b. Training programmes:

.....  
.....  
.....

12. الأثر البيئي للمشروع وطرق معالجته ( إن وجدت )

Project's environmental impact and ways of dealing with it (if any):

نقر وتشهد بأن جميع البيانات والمعلومات الموضحة في الطلب والمرفقات الملحقة به صحيحة ومن واقع المذكرة المقدمة عن المشروع ، وأنا نلتزم بتحقيقها وفقاً للشروط والالتزامات المقررة في القانون رقم (5) و تعديلاته بشأن تشجيع استثمار رؤوس الأموال الأجنبية ولاحتة التنفيذية والتشريعات الأخرى ذات العلاقة .

We certify that all information in this Application form and those information attached to it are correct and based on the report of the project; we are also committed to fulfil them according to the regulations as in the Law no. 5 of 1997 and his changed and its executive regulation as well as other related legal requirements.

Founders' Signatures

توقيع المؤسســــــــــــــــون

التوقيع والختم Signature	رقم جواز السفر Passport, ID no.	الجنسية Nationality	الصفة Title	الاسم Partner's name

التاريخ : Date : / /  
الموافق: / /